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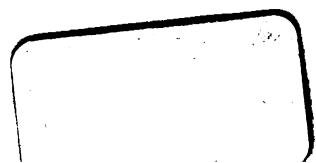
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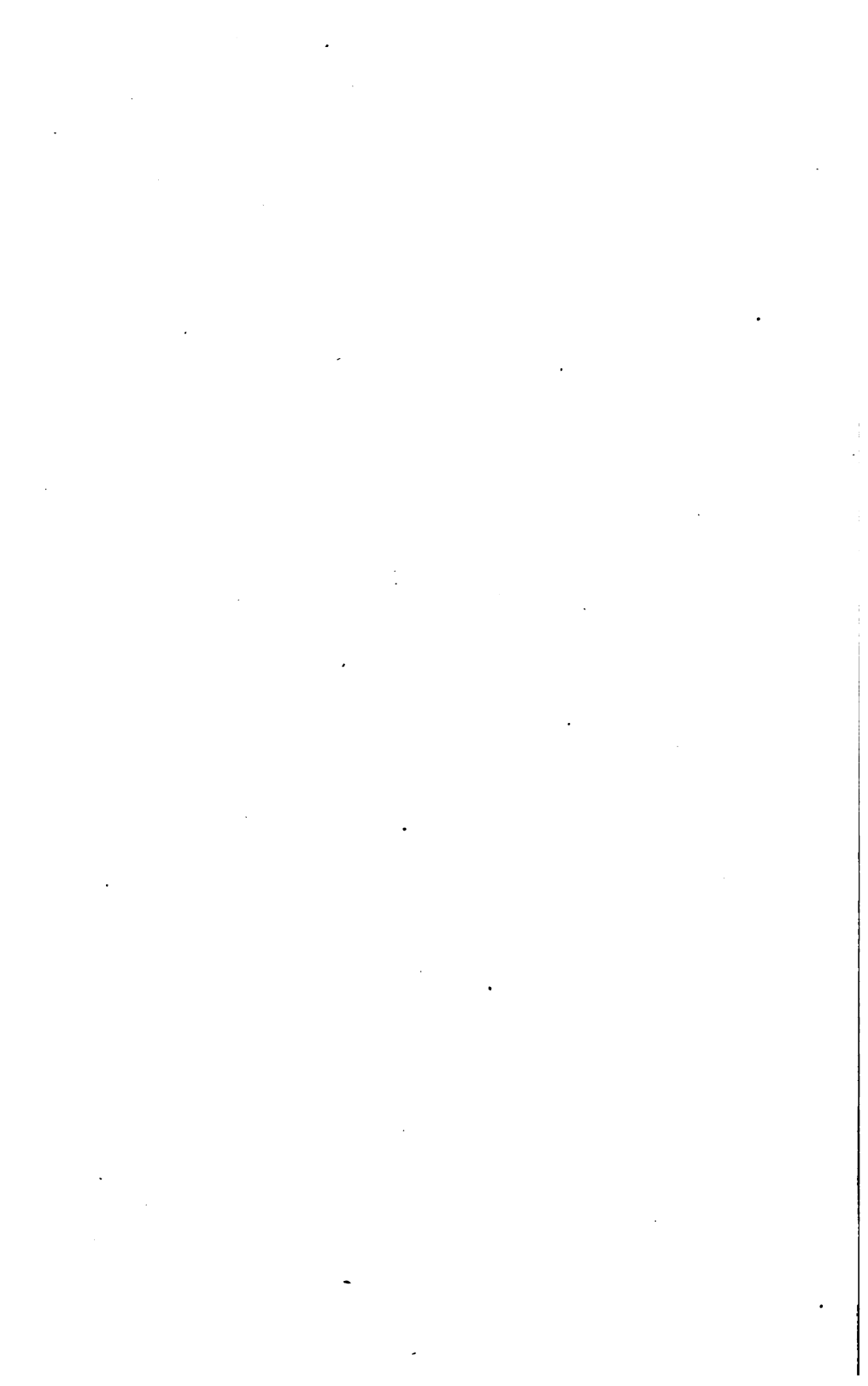
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Lehigh Valley Medical Magazine

THE OFFICIAL ORGAN OF THE

LEHIGH VALLEY MEDICAL ASSOCIATION

W. P. WALKER, M.D., Editor

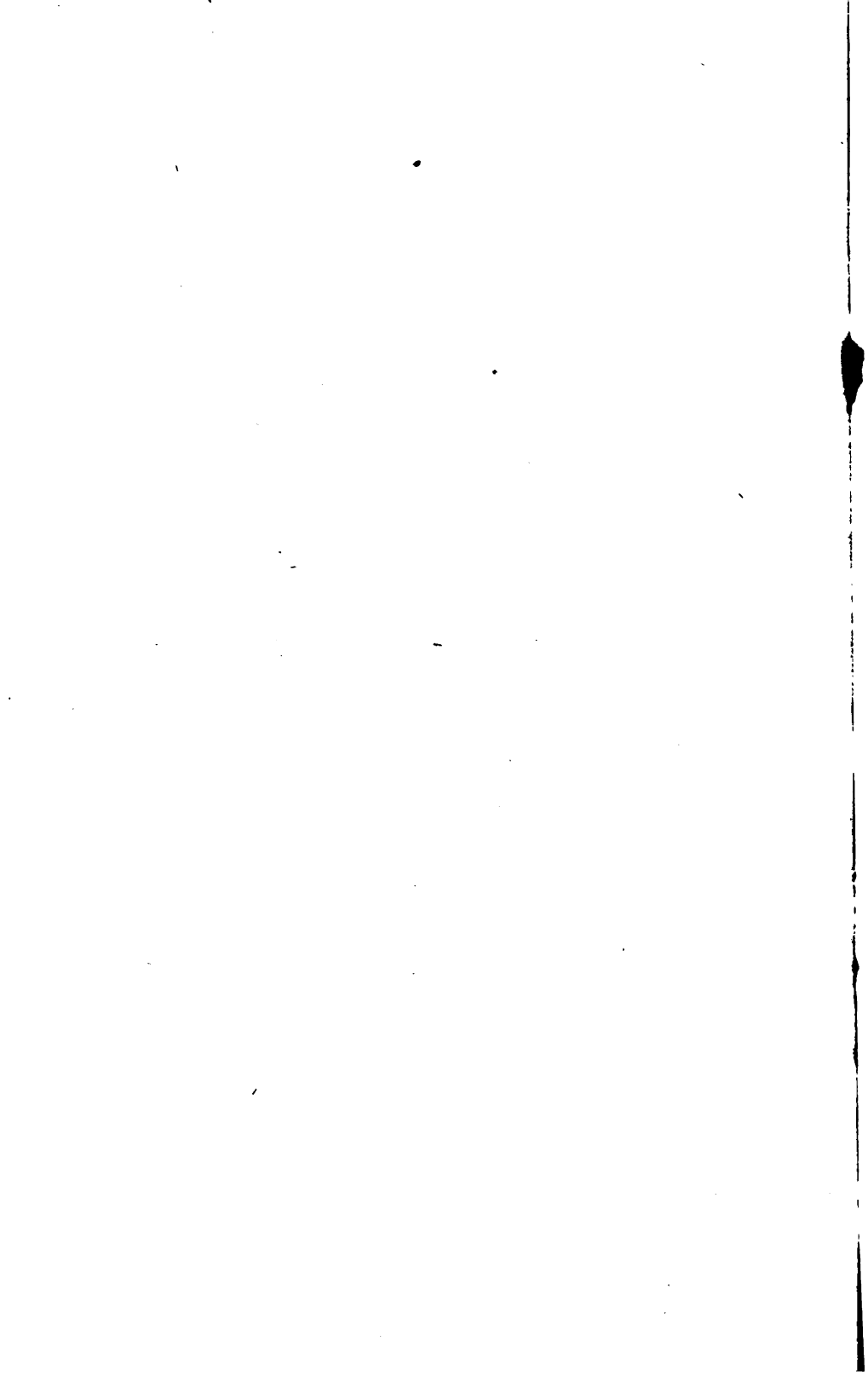
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LEHIGH VALLEY MEDICAL MAGAZINE.

Vol. XII.

JANUARY, 1901.

No. 1.

ORIGINAL ARTICLES.

INJURIES TO JOINTS.¹

By C. H. OTT, M.D., OF SAYRE, PA.

Railroad surgery is a distinct branch of surgical science and the railroad surgeon of the present is called upon to solve problems which are rarely brought to the attention of the general practitioner.

In no branch of surgery is there greater demand for an accurate knowledge of the anatomy of the human body and the discerning ability to save the life or an injured limb of the patient.

The accidents met with are peculiar and their magnitude oftentimes appalling. The injuries are of such an extensive nature and loss of blood so great, that it requires the finest judgment and largest experience to decide what is best for the patient. Conservatism can no where be more strikingly shown than in this branch of surgery. Particularly in injuries of joints is there opportunity for the display of the highest surgical skill.

Within the memory of the youngest member present, an injury to a joint, especially those of the ankle, knee, shoulder, and elbow, was considered most unfortunate and dangerous. Even an incised, punctured, or lacerated wound, was fraught with the direst results. How much greater was the dread of those severe crushing injuries with which we still meet!

The more I contemplate the results of the surgery of the present day and recall the teaching of twenty years ago, the more I appreciate the fact that Lister is one of the greatest benefactors of the human race. To his indefatigable research within season, and analytical mind, is due the possibility of

¹ The address of the retiring president of the Association of Lehigh Valley Railroad Surgeons, read before the annual meeting, New York City, October 5, 1900.

present-day surgery. His is one of those rare, original minds of which few appear in a century.

How well I remember the slighting, half contemptuous remarks of some of my surgical teachers. Men, too, who possessed great skill and judgment. They failed to grasp the underlying principle, and magnified the inconveniences of the spray, and the possibilities of carbolic or bichlorid poisoning. These same men came to what were then the important operations, in street attire and only washed their hands after the operation. No wonder laudable pus was considered necessary for healing and, if nature or a kind Providence occasionally seemed to be lacking in its production, attempts were earnestly and generally successfully made to bring it about. It seems incredible that, notwithstanding Pasteur's researches, it should have remained for one man to work out the problem.

It would seem as a result of Lister's teaching, and of those who have so ably elaborated it, that the limit of possible surgical success has been reached. We no longer regard injuries of joints with more concern or dread than a proportionally severe injury anywhere else on the body. The great problem is not so much the mere saving of the limb, but the possibility of the joint's usefulness as well. All things being equal, asepsis will accomplish almost anything. There is no longer that apparent imperative necessity to amputate a limb. If a limb or joint is properly cleansed, there is often less danger in waiting to see what nature will do than in resorting to immediate amputation. This is scientific, conservative surgery. I invite your consideration to the following cases:

On August 31, 1897, Lamont Farr, aged 15, in jumping from a rapidly moving train, came violently in contact with a fence resulting in an injury to his right arm. He was brought to the hospital as soon as possible where, on admission, he was etherized and the following condition noted: Found the biceps and brachialis anticus completely torn loose from their attachments to the radius and ulna respectively, and the superficial flexors torn across and retracted downwards. The coronoid process was broken off, allowing the triceps to draw the forearm backwards. The external condyle, including the articulation for the head of

the radius was broken off and comminuted. Extensive laceration of the skin about the joint allowed the above condition to be thoroughly examined.

The parts were scrubbed with soap and water, then with 1-500 bichlorid solution and sterile water and the usual dry dressing applied. The arm was placed on an angular splint. The patient reacted nicely. His highest temperature was on the morning of September 2d, when it reached $101\frac{1}{4}$; on the morning of the third it was $99\frac{1}{4}$ from which time on it was practically normal. September 3d, found the wound doing as well as could be expected. Arm badly swollen and contused from wrist to elbow. Reapplied splint with forearm in semi-prone position. The wound was dressed at intervals of four or five days on account of serous oozing. There was no pus, and on September 18th, I noted: Dressed arm this A.M.; looking very well. all sloughs have separated; made passive motion, pronation, supination, flexion and extension. September 23d, note: Dressed, made thorough passive motion.

This treatment was continued every four or five days as I was very desirous of securing a movable joint. We also employed Faradism to restore the tonicity of the muscles. On October 22d, I find recorded: Patient etherized this A.M., and made passive motion of right arm; forearm can be perfectly pronated and supinated; it can be extended to almost complete extension and can be flexed to slightly beyond right angle; the patient was discharged the next day with instructions as to what to do.

Some weeks ago, I wrote the patient in reference to the usefulness of his arm, and was informed that he had perfect pronation and supination, but no flexion or extension.

The cuts I show illustrate the condition at present. I believe had the patient had the courage to have persisted in the treatment, he would eventually have had an excellent joint.

The next case is an extremely interesting one on account of the multiplicity of the injuries received.

Willie Owens, aged 10, was admitted to the hospital on August 8, 1899. Shortly before admission, while running alongside of a moving train, he tripped on a board and fell against the train and sustained the following injuries:

1. A compound, depressed fracture of the skull over the left parietal bone.

2. Right foot torn completely off at the ankle, and the skin and subcutaneous tissues down to the muscles stripped up nearly to the knee, and the muscles contused and lacerated.

3. Left elbow sustained a compound, comminuted fracture. The inner condyle of the humerus and the olecranon process of the ulna were crushed off from the shafts of the bones.

The forearm was attached to the arm merely by the nerves, vessels, and flexor muscles. The musculo-spiral nerve was exposed for three inches, more or less torn and stretched. The skin was torn up from the deep fascia of the lower portion of the arm, and upper portion of the forearm, for at least eight inches. The wound was thoroughly cleansed with soap and water, 1-500 bichlorid and sterile water.

In order to retain the ulna in apposition with the humerus, both bones were drilled and a silver wire introduced and fastened. The skin was brought together as well as possible, bichlorid gauze dressing (1-1000) applied, and the arm placed on a right-angle splint. The depressed pieces of the parietal bone were removed, gauze-drain introduced, and bichlorid dressing applied.

The right leg was amputated at the upper third, the skin flap being taken from such of the skin as seemed likely to be in good condition, the object being to save the joint if possible. During the operation, he received 24 ozs. of saline under the breasts. August 9th, noted: Patient rested well and this A.M. is looking bright and feeling pretty well; temperature at 6 A.M., 98.6; pulse, 104. The patient did very well from this date on, except, that some of the skin on the arm sloughed, as did also the outer flap of the leg amputation. On August 21st, the leg was reamputated two inches higher up, just saving the joint.

On September 12th, the sloughs of the arm having all come away and the wound having granulated properly, he was again etherized and the ulcer covered with Thiersch grafts taken from the thigh. The silver wire which held the ulna to the humerus was removed. The recovery of the patient from this time was uninterrupted and he was discharged from the hospital, September 30th.

After the wire was removed on September 12th, passive motion was instituted and at the time of discharge he had flexion and extension to about 40°.

I have regretted having used silver wire to hold the bones together or not having removed it sooner. Had I brought the ligaments and soft parts together with catgut, passive motion could have been instituted sooner, with, I believe, more flexion and extension resulting. His pronation and supination were perfect. The unfortunate feature about these cases is that after they pass from one's care, passive motion is no longer persisted in and the best results obtainable are not achieved.

On November 3, 1899, Daniel Georgia, an engineer, was injured by the explosion of a locomotive boiler by which two men were killed and he sustained the following :

1. A compound dislocation of the right knee joint.
2. A compound fracture of the frontal bone.
3. Severe contusion of the left thigh with crush of second and third toes of the left foot. The interesting feature about this case was the knee-joint dislocation. The outer condyle of the femur protruded through the skin its entire size. Before attempting its reduction, the protruding condyle and surrounding skin were scrubbed with soap and water and 1-1000 bichlorid. The skin wound was enlarged and the bone reduced. The joint was then cleansed of blood clots and irrigated with 1-1000 bichlorid and sterile water. The skin was brought together after a small gauze drain had been introduced. The highest temperature recorded was on November 4th, 5 P.M., when it was 101.4, and the following noted: Feeling very comfortable; dressed knee, looking very well; wound absolutely sterile; irrigated joint with 1-1000 bichlorid and sterile water.

On November 8th, dressed and removed gauze drain.

On November 23rd, began passive motion. This was continued every two or three days and the patient was discharged on November 27th. Six weeks from the time of receiving the injury, the patient was walking without crutch or cane and had perfect motion. This case interested me very much on account of the prompt restoration of the usefulness of the joint.

The most remarkable case is, I think, the following :

On April 19, 1900, Jesse Horton, aged 20, was admitted to the hospital with the following history: A few hours previously, while reaching over a rapidly revolving saw, he slipped, and the back of his elbow struck the saw. The injury received was severe and he lost considerable blood. He was etherized and the following conditions discovered. The right elbow presented a lacerated wound posteriorly which involved the joint. The olecranon process was reduced to fragments and the external condyle of the humerus cut off. The forearm was attached to the arm by the flexor muscles, artery and nerves. When the arm struck the saw and the olecranon was cut through, the forearm was evidently thrown away from the saw, which would account for the arm not being cut off.

The wound was thoroughly cleansed as usual and the fragments of the olecranon removed. The external condyle was drilled and fastened to the shaft with a heavy catgut; the ligaments and soft parts were brought in apposition with catgut, a drainage tube inserted, usual dressings applied, and the arm placed on a right-angle splint. At midnight, the patient's temperature registered 102° ; at 4 A.M., 99.4° . It never rose higher. The patient made an uneventful recovery, and on May 7th was discharged from the hospital with a perfectly movable joint. Four weeks from the day of receiving the injury, he returned to work.

The excellent results obtained in these cases, I believe to be due to the following procedure: These severely injured people on admission are etherized and the injured limb and wound scrubbed with soft soap and water. It is impossible to cleanse any wound without an anesthetic; torn and ragged tissue is trimmed off. The wound is then most thoroughly scrubbed with a solution of bichlorid of mercury 1-500 or 1-1000, sterile water, or normal salt solution. Treated thus it is the rarest circumstance to have a wound suppurate. In fact, it so rarely happens, that there is no concern as to the result desired. I have never seen a wound thus treated and brought together with sutures fail to unite or the patient suffer from the absorption of mercury. As an antiseptic, bichlorid of mercury has given me better results than carbolic acid, formaldehyde, or any other.

The moral to be drawn from these cases is simply this: As

perfect attention to antiseptic and particularly aseptic surgery as possible.

I desire very sincerely to thank you for the honor bestowed upon me at our last meeting by electing me president of the Association.

REPORT OF A CASE OF RUPTURED KIDNEY—OPERATION—RECOVERY.¹

BY G. R. TROWBRIDGE, M.D., of Buffalo, N. Y.

Michael S. Pole, aged 42, was struck by a coal car coming rapidly down a grade in the Lehigh Valley coal trestle near this city, and thrown violently against the wall of the tunnel which is cut through solid limestone. Whether the car struck him in the back or whether he was thrown striking his back against the side of the tunnel I was unable to ascertain, nor was he able to tell himself. He was brought to Buffalo a distance of five miles on a locomotive and taken to the Fitch Hospital. Immediately on his arrival at the hospital he expressed a desire to urinate, and passed a urinal full of bright arterial blood mixed, I presume, with considerable urine. This was before I reached the hospital. After my arrival he passed two more urinals of blood, the vessel holding a little over one pint. He complained of soreness of the back on the right side, and a feeling of fulness, which latter could be distinguished by palpation. I made my diagnosis of severe injury to right kidney, as the hemorrhage, pain and fulness, weak pulse and pallor of the surface all pointed to this.

As it was my first experience in a case of this kind I called in Dr. E. J. Meyer to confirm the diagnosis which he did. On account of the alarming hemorrhage, operation was decided upon. Injections of strychnin and normal salt solution were given and the patient was hurriedly prepared for operation. A curved incision was made from the border of the ribs to the crest of the ilium. The blood poured out in excessive quantities, and for a few seconds the result looked extremely doubtful, as the pulse

¹ Read before the meeting of the Lehigh Valley Railroad Surgeons, New York, October 5, 1900.

failed rapidly, being imperceptible at the wrist. I immediately introduced my hand into the incision and grasped the bleeding vessels. At the same time injections of strychnin and salt solution were given. The vessels were held for about five minutes before the kidney was drawn out, and ligatures applied. Fortunately reaction was rapid. The kidney was then drawn into the wound and I found it was torn about two-thirds through. In its removal the rupture was made complete, and the specimen I show you gives a good idea of the extent of the injury. The incision was closed with silk-worm and catgut sutures throughout three-quarters of its length, and the remaining part packed with iodoform gauze. The after treatment consisted of hypodermic stimulation, normal salt solution injections, diuretics, large quantities of water and hot-air baths. The recovery was uninterrupted with the exception of two stitch abscesses. The conclusions I draw from this one of a rather uncommon class of cases is that immediate operative interference is necessary.

Lehigh Valley Medical Magazine

THE OFFICIAL ORGAN OF THE
LEHIGH VALLEY MEDICAL ASSOCIATION.

W. P. WALKER, M.D., Editor.

W. H. DUDLEY, M.D., Business Manager.

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EDITORIAL.

Hospital Abuse.—A physician in a neighboring town related to us an incident worthy of wider publication. A lady visited his office regarding treatment for her son, and the question of expense was raised. "If it costs too very much," she said, "I will go the hospital. All I will have to pay them for is the apparatus."

The doctor suggested that the hospital was a charity, and not intended for people able to pay for treatment.

She replied: "We always contribute to the hospital; when the collector comes around I always give; my husband contributes at the works, and we give at church. I can get a letter from my pastor."

"Who is your pastor?"

"The Rev. Mr. ———; he urges us to give, because, if we need any medical assistance we can be saved a doctor's bill; and I can get a letter from the pastor of the ——— church too. My neighbor said she would go with me and get one."

Upon an additional remonstrance as to the proper use of the hospital, she replied : " I know of many better off than we, who always go to the hospital. People who have no rent to pay, and own houses that are rented."

Comment seems almost needless. The managers and staff of any hospital who are willing to permit such a condition of affairs, cannot be reasoned with. Would it not be well for the physicians of Pennsylvania to urge the legislature to grant no appropriation to any hospital that does not take ample precaution against giving free service to those who can pay? And what can be said of the minister of the Gospel who gives a letter for such a purpose? Let us be charitable and say he does not know any better.

NEWS ITEMS.

The following figures are compiled from the results of the Pennsylvania State Medical Board examinations, held in June, 1900.

Name of college.	Number examined.	Number failed.	Per cent. failed.	General average.
University of Pennsylvania.....	121	2	1.65	84.58
Jefferson Medical College	38	4	10.53	81.56
Medico-Chirurgical College	20	4	20.00	75.82
Western Pennsylvania Medical College.....	67	9	13.43	79.68
Women's Medical College, Philadelphia	16	0	00.00	83.50
Baltimore Medical College	12	5	41.67	80.47
Baltimore University	5	4	80.00	65.31
Maryland Medical College.....	4	3	75.00	72.41
University of Maryland.....	3	0	00.00	82.21
College of Physicians and Surgeons, Baltimore	3	2	66.67	73.83
Miscellaneous	38	8	21.05	79.05
Total	327	41	12.53	81.28

LEHIGH VALLEY MEDICAL MAGAZINE.

Vol. XII.

FEBRUARY, 1901.

No. 2.

ORIGINAL ARTICLES.

CONTAGIOUS DISEASES AND THE FAMILY PHYSICIAN.¹

BY DAVID TAGGART, M.D., Frackville, Pa.

In a paper of this kind, of course, my time must be limited. It may be well though, to spend a few minutes in very brief review of the different contagious or infectious diseases, and the manner in which the contagion is disseminated: Scarlet-fever, smallpox, diphtheria, and measles directly from person to person as well as by intermediaries. Remember too that the infection from the exanthemata may remain in the clothing, bedding, and furniture for a long time. Cholera, dysentery, and typhoid fever contaminate the fluids and solids used as food and drink by human beings; influenza, whooping-cough, and typhus fever seem to travel through the air, which is true to some extent of the other diseases. Puerperal fever, to use an old term, may be conveyed on the person of physician or nurse, as well as by instruments. However, I do not propose to read any lecture on the etiology of contagious diseases, but merely to ask whether or not we, as physicians, do our whole duty, and use our influence to prevent the spread of contagious diseases when the communities in which we live are subject to such visitations. I would also like to remind you of a few simple precautions which are efficacious, and which I think we can all carry out. How many of us for instance when we have a consumptive patient properly instruct him or his family as to the disposition of sputa and the danger resulting from close intercourse with family and friends? How many of us take special means to prevent the spread of measles which to my mind is far from being the harmless disease which it is usually considered? I grant that the problem confronting the country practitioner,

¹ Read before the meeting of the Lehigh Valley Medical Association, Easton, Pa., January 31, 1901.

and he is the man I am trying to talk to to-day, when he finds himself in charge of a contagious case is sometimes a hard one. He gets but little sympathy and aid from family and friends of the patient, and often very small comfort from his professional neighbors in his efforts. In connection with that point, I will say that a few months ago I was called to a case of scarlet-fever and learned that the mother of my patient had been advised to send for another physician, because he would not report the case, unless it got very bad, and she need not keep her other children from school. Comment seems hardly necessary. To return to our problem, while it may be hard, still by firm, patient, good-natured reasoning we can do a good deal towards:

1. Isolating our patient.
2. Having one member of the family act as nurse to devote her whole time to the patient and prevent other members of the family and visitors from having access to the sick-room.
3. We can have the excretions and expectorations in such diseases as typhoid fever and diphtheria received in disinfectant solutions, and burned or otherwise properly disposed of.
4. We can have clothing and bed-clothing thoroughly boiled and the furniture, floors, and walls scrubbed with some disinfectant solution; those recommended by the state board of health are good and not expensive.
5. We can have the patient bathed and disinfected before we let him mingle with the public.

These few points seem simple, and one would think any family would be glad to adopt such procedures. It is hard though to have even that much done. So many people seem to be fatalists and say: "If the disease is going to spread it will spread, and what is the use of trying to prevent it?" By taking the heads of families into our confidence, and instructing them as to dangers of contagion much good may be accomplished.

Then there is the visitor who is not afraid of catching anything and wanders all over the region, leaving poison in her trail. She, for it is generally some elderly female, regards sanitary efforts as nonsense, and boards of health as officious nuisances. They did nothing of that kind when she was young, and they had more smallpox then than they have now. She can only be

kept out of the sick-room by force and that should be employed. I have noticed that boards of health in small towns only seem to be stirred into real activity in the presence of smallpox. Scarlatina and diphtheria must assume awful proportions before they can be induced to take any effective action. Now let me repeat that I am not talking to those who live in towns with active boards of health with means and disposition to use those means for the prevention of disease. My few remarks have been intended merely to remind the country physician of his duties in certain respects. We have not done our whole duty when we discharge a patient as cured of a contagious disease unless we insist that at least the simple things I have mentioned are carried out. We may give protective doses of antitoxin to the immediate family, but that is small benefit to the community if we allow careless visitors to carry diphtheritic poison over the town or country. We may take great pride in the recovery of a scarlet-fever case, but that will in no wise benefit an unsuspecting child who may, perhaps months afterward, contract that dread disease from furniture or bedding that we might have had thoroughly disinfected.

In conclusion let me ask you all to be careful when a professional friend, or enemy either, is taking all possible precautions in a contagious case, not to convey the impression that you think he is unnecessarily officious.

AMONG THE SOCIETIES.

LEHIGH VALLEY MEDICAL ASSOCIATION.¹

XIII WINTER (CONVERSATIONAL) MEETING—TRANSACTIONS.

The thirteenth winter (conversational) meeting of the association was held at the United States Hotel, Easton, Pa., on Thursday, January 31, 1901. President A. A. Seem presided and called the meeting to order at 9.30 A.M.

The program as follows was reported and adopted.

PROGRAM.

- I. Call to order.
- II. Report of the Executive Board.

¹ Official report.

III. "Contagious Diseases and the Family Physician," by Dr. David Taggart, Frackville, Pa.

The modern hypothesis of contagious diseases ; precautions often overlooked in private practice ; duty of the family practitioner.

Discussion to be opened by

1. Dr. H. H. Herbst, formerly President of the Board of Health of Allentown.

2. Dr. Morris F. Cawley, Medical Inspector, State Board of Health ; Health Officer of Allentown.

IV. "The Burden of Hereditary Mental Diseases," by Dr. W. H. Hartzell, Allentown, Pa.

Proof of heredity in epilepsy, insanity, and imbecility ; manner of propagation ; expenses incurred in providing for the same ; the burden the expenses impose upon the taxpayers ; the many crimes committed. The remedy lying in restricting marriage laws and asexualizing the defectives.

Discussion to be opened by

1. Dr. C. B. Smith, Washington, N. J.

2. Dr. Charles K. Mills, Philadelphia.

V. "New Tribulations and Joys of the General Practitioner," by Dr. W. R. Cooper, Point Pleasant, Pa.

Some of the changes in obstetric practice and surgery (more particularly in relation to appendicitis) as conducted by the general practitioner, brought about by aseptic and antiseptic technique and the employment of the clinical thermometer. A comparison of results of the old way and the new.

Discussion to be opened by

1. Dr. J. G. Zern, Lehighton.

2. Dr. G. N. Best, Rosemont, N. J.

VI. "Salivary Fistulae," by Dr. Henry D. Michler, Easton, Pa.

The nature of the ailment, methods of treatment illustrated by the clinical history of a case.

Discussion to be opened by

1. Dr. W. Joseph Hearn, Philadelphia.

2. Dr. W. L. Estes, South Bethlehem.

VII. Supplemental Report of the Executive Board.

VIII. Adjournment.

The executive board recommended the following applicants for membership :

Drs. C. J. Otto, C. J. Kistler, L. J. Saeger, and W. H. Harrison.

Drs. Mensch and Frace were appointed tellers and subsequently announced all the applicants elected.

The reading of papers was then proceeded with.

Dr. Taggart, of Frackville, Pa., opened with "Contagious Diseases and the Family Physician." (See current issue Magazine.)

Dr. Charles McIntire opened the discussion in the absence of Drs. Herbst and Cawley. Drs. Cawley and C. S. Martin followed.

The next paper entitled "The Burden of Hereditary Mental Diseases" was then read by Dr. W. H. Hartzell, Allentown.

Drs. Charles K. Mills, W. H. Harrison, and Charles McIntire took part in the discussion. (The paper entire will appear in the next issue.)

Drs. W. R. Cooper and Henry D. Michler were both absent, so their papers were not presented.

Informal remarks were made by a number of the gentlemen present bearing on the subject to have been presented by Dr. Cooper.

Drs. Estes and Hearn then spoke briefly on the subject of salivary fistulae, the former presenting a case of bilateral parotid fistulae, recently operated on successfully.

President Seem then announced the following Nominating Committee, who are to report at the next annual meeting :

Berks County, Israel Cleaver; Bucks County, J. N. Richards; Carbon County, J. A. Horn; Hunterdon County, O. H. Sproul; Lebanon County, I. R. Bucher; Lehigh County, C. S. Martin; Luzerne County, O. F. Harvey; Monroe County, J. P. Mutchler; Montgomery County, J. W. Groff; Northampton County, Robert S. McCay; Northumberland County, David Taggart; Warren County, C. M. Williams.

The executive board then presented its supplemental report, which recommended Drs. Jno. Fisher and D. W. Richards for membership. The tellers proceeded with the collection of ballots and announced both applicants elected.

The association then adjourned, after which an excellent dinner was served in the hotel.

The following members were registered :

Dr. Morris F. Cawley, Allentown; Dr. W. H. Dudley, Easton; Dr. W. L. Estes, South Bethlehem; Dr. A. P. Fetherolf, Allentown; Dr. P. W. Frace, Easton; Dr. E. M. Green, Easton; Dr.

Philander A. Harris, Paterson, N. J.; Dr. W. H. Harrison, Easton; Dr. W. H. Hartzell, Allentown; Dr. W. Joseph Hearn, Philadelphia; Dr. J. L. Hornbeck, Catasauqua; Dr. David H. Keller, Bangor; Dr. J. C. Keller, Wind Gap; Dr. M. D. Knight, Clinton, N. J.; Dr. A. L. Kotz, Easton; Dr. Charles McIntire, Easton; Dr. C. S. Martin, Allentown; Dr. James G. Mensch, Pennsburg; Dr. Charles K. Mills, Philadelphia; Dr. C. J. Otto, Allentown; Dr. William A. Rentzheimer, Hellertown; Dr. D. W. Richards, Easton; Dr. J. N. Richards, Fallsington; Dr. H. H. Riegel, Catasauqua; Dr. Luther J. Saeger, Allentown; Dr. C. D. Schaeffer, Allentown; Dr. A. A. Seem, Bangor; Dr. W. H. Seip, Bath; Dr. Abraham Stout, Bethlehem; Dr. David Taggart, Frackville; Dr. Lewis H. Taylor, Wilkes-Barre; Dr. W. P. Walker, South Bethlehem; Dr. E. T. Wilhelm, South Bethlehem; Dr. Charles M. Williams, Washington, N. J.

The visitors present were

Dr. O. E. E. Arndt, Easton; Dr. A. H. Lee, Easton; Dr. Kate D. Miesse, Easton; Dr. E. H. Moore, Whitehouse Station, N. J.; Dr. H. Augustus Wilson, Philadelphia.

EXECUTIVE BOARD.

The executive board met Wednesday evening, January 30, 1901, at 8 P.M. There were present Drs. McIntire, Seem, Taggart, Taylor, and Walker. Dr. Seem presided and the motion prevailed that Dr. Taggart represent Schuylkill County. The minutes of the previous meeting were read and approved.

Certain bills were then presented by the secretary of the association, and on motion of Dr. Taylor they were approved, and orders to cover directed to be drawn.

The place and time for the annual (summer) meeting were then discussed. Mauch Chunk, Water Gap, and Hazleton were mentioned favorably, and the final decision was ordered left to the Committee of Arrangements; Thursday, July 27, 1901 was decided on as the date.

The president and assistant secretary were appointed a committee to prepare the annual report of the executive board to the association.

A number of applications for membership were then examined and the following recommended to the association for election. Drs. C. J. Kistler and L. J. Saeger. Drs. Taylor and Hartzell were appointed a committee to examine applications presented during the meeting the following day.

The secretary was instructed to notify by letter the gentlemen composing the Committee of Arrangements for the annual (summer) meeting. Adjournment was then taken to 9:25 A.M., January 31st.

The board, through its committee, examined and approved some additional applications for membership, which were subsequently presented to the association. After the adjournment of the association, the board met and adjourned to Wednesday evening, July 26, 1901.

CHARLES MCINTIRE, *Secretary.*

W. P. WALKER, *Asst. Secretary.*

Lehigh Valley Medical Magazine

THE OFFICIAL ORGAN OF THE
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Correspondence regarding subscriptions and other business to Dr. Charles McIntire, Treasurer, 104 North Fourth Street, Easton, Pa.

Office of Publication, 104 North Fourth Street, Easton, Pa.

EDITORIAL.

Urine in Typhoid Fever.—The Board of Health of New York City has had circulars issued regarding the importance of disinfecting the urine of typhoid fever patients.

The *Medical News*, in a recent issue, calls attention to the fact that in from 30 to 50 per cent. of typhoid cases the typhoid bacilli are present in the urine at some time during the disease, usually appearing at the second or third week, and soon disappearing. In about 10 per cent. of the cases they continue during convalescence. The bacilli are often found in great numbers, and the urine may exhibit no change in appearance or composition.

In view of these facts it is highly important that the urine as well as the stools receive disinfection, and we believe that this is not remembered and attended to as it should be.

Diphtheria.—The *American Journal of the Medical Sciences*, for February, 1901, publishes a very interesting paper by Fred.

Grant Burroughs, A.M., M.D., entitled "A Clinical Study of Diphtheria." The article is based on 2,093 cases, treated at the Boston City Hospital, during the year ending August, 1900. A number of tables are included showing the distribution by age and sex, the deaths for each year of life, with mortality percentages; the number of cases showing cardiac complications, with the time of development of same; a table of maximum pulse-rate, with ages and mortality percentages, and the number of cases presenting albuminuria with mortality rate. The record of 337 cases of laryngeal diphtheria, with 213 intubations is also included.

Valuable comparisons are made between the mortality rate in Berlin, Paris, Boston, and other American cities preceding the use of the antitoxin treatment, and the present death-rate in the same places, with antitoxin. The dosage of antitoxin as practised on this series of 2,093 cases is given, and also interesting data under the headings "Intubation," "Tracheotomy," and "Complications." The article is too long and too comprehensive to do justice to by an ordinary abstract, and those interested should read it in its entirety.

Vaccinia and Influenza.—Dr. A. Jacobi, in a rather recent paper on influenza, recalled some observations made some few years ago in a European town, where an epidemic of smallpox preceded, shortly, one of influenza. It was noted at that time that nearly all persons vaccinated escaped the influenza, but that the latter malady raged among the rest of the community. Dr. Jacobi suggested that later observations would be interesting.

We, in this region, have had a number of vaccinations recently, brought about by the unusual number of smallpox cases in New York City and vicinity, and closely following this the "grip" has visited many in this neighborhood. Have any of our readers noticed that vaccination conferred immunity to "grip" to any degree?

NEWS ITEMS.

Allentown Hospital.—The fifth annual report of this institution, for the year ending December 31, 1900, shows the following cases admitted during the year: medical, 98; surgical, 282;

total admissions, 380. Remaining from previous year, 16. Total cases treated, 396. Of the medical cases 80 were discharged cured; 11 improved; 2 unimproved; 5 died; and 4 remain. Of the surgical cases 256 were cured; 9 improved; 2 unimproved; 15 died; and 12 remain. 160 operations were performed with 142 cases cured; 2 improved; 1 unimproved; 9 deaths; and 6 remaining.

The treasurer's report shows an expenditure of \$8,000 during the year, with a balance on hand. The daily average number of patients was 18. The cost of maintenance, \$1.15+ per day.

Herbert S. Stone & Co., Publishers, Chicago, announce the preparation of the following :

A TEXT-BOOK OF SPECIAL SURGERY, for Practitioners and Students. By DR. FRANZ KOENIG. Translated from the Seventh German Edition, which has but recently appeared, by ARTHUR B. HOSMER, M.D., and edited by CHRISTIAN FENGER, M.D.

This will be the authorized translation, and will consist of three large octavo volumes on an especially fine grade of plate paper, and each volume will contain in the neighborhood of 300 illustrations.

PAMPHLETS RECEIVED.

Dudley, Wm. H., M.D. Cerebral Abscess, Following Chronic Otitis Media Purulenta—Operation—Recovery.

Goelet, Augustin H., M.D. Aseptic Minor Gynecology, with Demonstrations.

Lautenbach, Louis J., A.M., M.D., Ph.D. (1) Treatment of Nasopharyngeal Adenoids. (2) A Few Thoughts Indicating a Causative Connection between the Uric Acid Diathesis and Astigmatism against the Rule. (3) Increasing the Therapeutic Value of Cod-Liver Oil by the Addition of Free Iodine and Free Phosphorus. (4) Gonorrheal Conjunctivitis: Its Treatment.

Trowbridge, G. R., A.M., M.D. Pernicious Anemia. Report of a Case.

LEHIGH VALLEY MEDICAL MAGAZINE.

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No. 3.

ORIGINAL ARTICLES.

THE BURDEN OF HEREDITARY MENTAL DISEASES.¹

By W. H. HARTZELL, M.D., Allentown, Pa.

It may appear like a waste of time to present proofs of the existence of heredity as a large factor in the production of those forms of nervous diseases of which I propose to speak. My reasons for doing so are twofold ; the existence of heredity as such a factor, has been occasionally denied by men in such position in the medical world that their opinions must carry some weight, even though they are opposed by the large majority of thinking men who have given this subject their attention and the existence of statistics which have been most carefully compiled and verified ; moreover, the large and rapidly increasing number of these defectives, and the rapidly growing burden of their maintenance, as well as their harmful effect on society at large, can only be realized in this way.

The three forms of nervous diseases which are most certain to make their victims more or less dependent, and thereby become the burden of which I complain are epilepsy, insanity, and imbecility. Either of these disorders interferes seriously with the victim's power of self-support, renders him dangerous to society, and becomes the burden on the public, the support of which involves all taxpayers and at a rate alarmingly.

In dealing with heredity in this connection it is not reasonable to expect each of these conditions to reproduce itself exactly in kind. The law of heredity is, that each characteristic in the parents *tends* to reproduce itself in the offspring. Again, characteristics derived from one parent may be masked or overcome by the influence of the other, they may be permanently obliterated.

¹ Read before the Lehigh Valley Medical Association, Easton, Pa., January 31, 1901.

ted, or reappear a generation farther on, under favoring circumstances. The three conditions I have enumerated are all merely evidences of functional disturbances of the higher nervous centers, due to trophic or organic change. The special form and order of appearance are dependent largely or entirely on the portion of the brain implicated and the age of the subject ; as for instance, where brain trouble occurs early in life we may expect epilepsy or imbecility, or both ; and when this trouble happens after the mental growth is more or less developed, we look for insanity, because the inhibitory control of the motor centers in the adult is more powerful than in youth. But we want to consider this subject only as an inherited trouble, and the statistics in this are more accurate and reliable than any other, for the reason that its symptoms are so unmistakable that there is less possibility of the friends deceiving themselves or others in regard to its existence.

Even in uncomplicated epilepsy, if the spasms are at all frequent, the sufferer's power of self-support is lessened if not destroyed, and the burden of his maintenance comes on his family and kin, or on the general public.

Eccheverria, after ten years' careful research in tracing the histories of the offspring of epileptics, found that 62 male and 74 female epileptics begat 533 children, whose life histories were as follows: 22 were still-born, 195 died in infancy from convulsions, 78 lived as epileptics, 18 lived as idiots, 39 as paralytics, 45 as hystericals, 6 had chorea, 11 were insane, 7 had strabismus, 27 died young from other causes than nervous disease, and only 145 were healthy.

Now let us look at a marriage of two epileptics : five children were born to them. Two died in infancy from convulsions, one from hydrocephalus, one lived as an epileptic, and one was bright.

Of Eccheverria's 186 original cases, 87 had parents with either insanity or epilepsy, while in 46 cases epilepsy had existed through three generations ; one woman had epilepsy from puberty until marriage and then no more. She bore four children, two were epileptic, one paralytic, and one well.

Another epileptic mother bore 15 children, eight died in infancy, two were fairly teachable imbeciles, two were epileptics,

and three had sufficient intelligence to secure husbands, and thus transmitted the heredity to succeeding generations.

The heredity of insanity is not so evident, nor is it so certainly transmitted to the offspring for the reason that very many cases of insanity are due to excesses committed in early adult life, but the census report for 1890, adding the legitimate rate of increase would give us at present 100,000 feeble-minded, and the same number insane, or 200,000 persons to feed, clothe, and support, and no doubt the number is much larger, for it is both more easy and more usual to deny than to admit idiocy in the family, while mental weakness, which results from accidental brain injury or from infantile acute disease, carries no more discredit than a broken limb or pleuritic adhesions.

The mother's love for her children and sense of family shame induces concealment. Dr. Ireland mentions a case illustrating the persistency of heredity where a mother gave birth to four feeble-minded children by four different fathers; Dr. Barr has well authenticated histories of two women, one of whom bore seven illegitimate imbecile children, each time by a different father. Another had seven imbecile offspring of whom only three could claim the same father. Dr. A. W. Wilmarth, our former first assistant at the Norristown Hospital, to whom I am much indebted for access to these reports, says he saw two idiots from the same mother but different and healthy fathers, while assistant at Ellwyn.

The most remarkable increase in some of the degenerate families which dominate in animal strength, with mental weakness, of which I am familiar, is best illustrated by two instances. One is founded on the report of Miss Schuyler, president of the New York Charity Aid Society, on "Margaret the Mother of Criminals," who is alleged to be the progenitor of a family of paupers, beggars, prostitutes, and criminals, which finally became a race of 700. The family vigor was largely preserved by intermarriages with fresh vigorous families of ruffians and some of the women bore at least 20 children, among whom were insane, epileptics, and imbeciles. I would quote further the family alluded to by Dr. Barr, in his exhaustive paper on the influence of heredity in the production of idiocy, known as "The Tribe of

Ishmael" where the descendants of one unclean man, traced through many years, multiplied by consanguineous marriages into 250 families, numbering some 5,000 individuals, whose continuous criminal record has poured over the northwest a flood of imbecility and crime.

So far I have dwelt exclusively on the heredity of these affections; let us now consider the burden which is so appalling that perhaps few have looked into it.

The six state hospitals for the insane in Pennsylvania, namely, Norristown, Wernersville, Harrisburg, Danville, Warren, and Dixmont, have about 10,000 insane, independent of the number in Blockley and the numerous poorhouses of the counties. Taking the cost of keeping each per week at Norristown, which is the third lowest in the United States, at \$2.94, will cost the state \$2,940,000 for maintenance. To this you add \$500,000 for betterments as it is generally called, or improvements. The original cost for grounds and buildings about \$10,000,000; six per cent. interest on this principal is \$600,000, and then we will learn that Pennsylvania expends annually, \$4,040,000 for insane only in those six institutions. This alone is an average cost of \$4.00 for every voter in the state, to say nothing of the feeble-minded at Ellwyn, Pittsburg, the poorhouses in every county, and of the enormous costs in courts where this class multiplies expenses so rapidly.

Nor is the burden only measured by dollars and cents, as I have shown you above, but also in endangering human lives and property. It often happens that after murder the perpetrator is adjudged insane, and stealing and defrauding are hardly less offensive. This subject has confronted alienists for a long time and how to dispose of it in a more favorable way has not submitted to a proper solution yet.

The remedy for this state of affairs is a subject which demands earnest thought and radical measures for relief. The evil is so grafted on the every-day life of society that to think of its immediate or entire suppression would be folly, but it is time to make a beginning. We cannot expect much relief from purely medical means. No more hopeless disease exists among the common maladies than epilepsy in the adult. The relative small number

of recoveries in hospitals for the insane would be largely diminished if we subtracted those committed to recover from alcoholism and cases of recurrent insanity who recover only to be recommitted.

I know of one individual who enriched the records of a hospital with nine recoveries inside of a period of that many years. The superintendent of an institution for feeble-minded no longer looks for restoration to normal brain power in any large number, and even in such cases as do leave, there is a fear that their places may soon be claimed by their children. He derives his principal satisfaction from the fact that in the asylum his institution affords, the unfortunate, the low-grade imbecile, and the idiot are safer and more comfortable, and the high grade is at least safer than he could be elsewhere; also in the fact that healthy children are relieved of associates who could do them no possible good, the family freed of a care and expense often so burdensome as to keep them poor, and lastly that the yearly increasing care which often wears out the mother prematurely is removed, thus allowing the other children more of her time and attention.

Again, by isolating the girls of child-bearing age, we are diminishing the ranks of criminals, drunkards, vagabonds, and prostitutes. In referring to the state care of defective girls, during the child-bearing period, no explanation of its necessity is needed, or why it is more urgently needed than in the other sex; for no normal woman is in the same danger from an imbecile man, as the girl with normal passion and little power of self-restraint, is from the vicious man. It seems strange that our marriage laws should be so lax. The marriage of the unfit goes on unhindered. The epileptic may marry his kind, the deaf and dumb his or her kind, the drunkard from a body thoroughly diseased may produce any number of defective children to become public wards, to be supported by the more self-respecting and industrious.

There is no legal restriction against the man whose grandfather and father were insane, and who has been insane himself, marrying some woman similarly gifted, and charging the result of offspring to the public.

The lunacy law of Pennsylvania expressly provides that per-

sons while still insane may go home for a stated period to resume all their family relations. Is it not time for a radical change in this condition of affairs? Should not more stringent marriage laws be enacted and enforced? Should we not follow the example of New York State, which restricts and provides for mentally and morally enfeebled girls especially from puberty to menopause? So long as such a state of affairs continues, we must expect a constant increase in the number of the defective class, the size and number of our charitable institutions, the growth of crime and misery, and the burden of taxation.

The marriage of such persons should be legally prohibited. It is silly to protest that such measures would increase sexual crime. Sin will exist as long as human weakness shall live and it is not to be controlled by permitting the constant increase of a class least able to exercise self-control. Women, in every way fitted to become wives and mothers, hesitate, before the responsibilities such a position entails, while the other class rush headlong at the first opportunity, merely to gratify animal passion or instinct and assume duties they can never adequately fulfil.

The right of the public to control powers which militate against the public good, is not to be denied, and such laws judiciously applied would work no material hardships, and interfere with no one's just rights.

In conclusion : On whom does this responsibility of righting the wrong fall more heavily than upon ourselves? No one understands as we understand, how surely the fruit follows the seed in these matters, and no one's word would have the same weight in moulding public opinion to force legislation to this end.

The act of marrying two people, one of whom is known to be afflicted with either of the defects herein specified, or who has already borne more than one defective child, should as certainly subject the offender to punishment as would any other offense against the public peace and morals. The whole body of the intelligent public would join opinion with us in this matter. The voice of the clergy would be with us in recognizing the high duties of marriage, with the exception of a very few who by no means represent their body, but who utterly neglect the divine warning that the father's sin will curse the life of the child, and

cheerfully perpetuate the curse for the mere pittance of a Jewish half shekel of silver as a compensation.

These two measures—guarding and defending the weak during the child-bearing age, and preventing in some measure marriage among those who can only perpetuate and increase human poverty, suffering, and crime—would be at least a step in unloading the burden, although fall far short of fully solving the great question. They have the advantage, however, of being practicable.

The most radical measure, and one that may come sooner or later is "The Castration of the Defective."

This radical measure to prevent the extension of mental weakness by inheritance, through the removal of the ovaries, advocated by Dr. Kerlin, and emphatically endorsed by the late Dr. Goddell, is perhaps too advanced for immediate and general adoption, but robbed, as the operation is, of most of its dangers by the skill of the modern surgeon, it is difficult to understand why these women should retain a function which will only bring transmission of this great misfortune, entailing as it does suffering, unhappiness, helplessness, or crime. And Dr. Eskridge, in his able treatise on mental diseases, says: "I shall not attempt to discuss the castration of the defective to prevent the propagation of his own kind; for at first thought this seems barbarous and inhuman, but the day is rapidly coming when enlightened penologists, physicians, and statesmen will give this subject careful thought."

In the interests of the human race, something ought to be done to prevent injudicious or almost criminal marriages between persons whose offspring are doomed to idiocy, imbecility, or epilepsy. Could these unfortunate children have an intelligent voice in their procreation, we could imagine them on bended knees, with uplifted hands and weeping eyes, earnestly beseeching and imploring their would-be parents to desist from bringing them into a state in the which it were better never to have been born, and the begetting of children by such parents would be an outrage upon society.

We cannot abolish human sin and human weakness, but we can deprive them of the seal of the state and the Christian Church.

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EDITORIAL.

"State Board of Medical Examiners and the Degree of M.D."—This is the heading of a communication by Dr. Theodore Diller, in the February number of the *Pennsylvania Medical Journal*. As it touches upon a topic which is agitating the profession throughout the United States, the many misstatements in that communication ought not to pass without contradiction, which need not be done were the topic not so timely. If our readers will refer to p. 484 of the *Journal*, they will be able to determine if we interpret the article fairly.

The first error is comparing an examination for the M.D. degree with the examination of a lawyer, admitting to the bar; or of a clergyman, leading to ordination. We have theological seminaries granting the degree of S.T.B. or B.D., and law schools giving a degree of LL.B., but few courts and still fewer church councils would accept the possessor of a degree without

its own examination to determine the fitness of the candidate.

The next error is the assumption that a graduate of a medical school thereby acquires a legal right to practise—not so ; the degree is but a university distinction. It is true that it was not so regarded for a number of years in the United States, and even yet in some states the law makes the possession of the degree the only qualification, but the right is not inherent to the degree, any more than the S.T.B. ordains a man to preach, or the LL.B. permits its possessor to plead.

The third error may be only a matter of opinion. He suggests that Pennsylvania should examine the candidates for the degree of doctor of medicine, and that the degree be conferred only on those who pass the state examination, so that their doctorate would give them the license to practise, and adds : “ Such action would place Pennsylvania in line with enlightened European states.” Many of us would include Germany and Austria in this class, but an M.D. from Berlin or Vienna does not permit its holder to practise in either country until he passes *Staats Examen* ; and it is not an unheard-of incident that a doctor in medicine of a German university determined to bestow his service in the United States because he failed to secure his state license to practise at home.

The errors of fact in the doctor's letter cause it to act as an astronomical telescope, where everything is reversed, and it seems to him that the horse is behind the cart. If he will make use of the facts as they are, these will serve as the erecting eyepiece in that instrument, whereby it will cause him to see that the juxtaposition of the horse and the cart is entirely normal, and in harmony with the turn-outs of the other professions.

Membership of the Lehigh Valley Medical Association.—In this issue we publish a list of the members of the association. The names are arranged alphabetically under the headings of the different counties, embraced within the territory of the association. One of our members suggested a short time ago that such a list would be convenient, and as nothing giving this information has been issued recently, it was decided to publish it in the MAGAZINE.

BERKS COUNTY, PA.

Beaver, D. B. B., 150 North 6th St., Reading.
 Reeser, H. S., 111 South 5th St., Reading.
 Cleaver, Israel, 223 South 5th St., Reading.
 Trexler, J. S., Kutztown.
 Lytle, Frank P., Birdsboro.
 Weidman, W. Murray, 214 South 5th St., Reading.
 Raudenbush, A. S., 116 South 4th St., Reading.

BUCKS COUNTY, PA.

Cooper, W. R., Point Pleasant.
 Ott, John J., Pleasant Valley.
 Crewitt, J. A., Newtown.
 Richards, J. N., Fallsington.
 Erdman, W. S., Buckingham.
 Stettler, W. H., Spinnerstown.
 Fretz, C. D., Sellersville.
 Stuart, G. E., Ivyland.
 Fretz, O. H., Sellersville.
 Thomas, Joseph, Quakertown.
 Grim, G. M., Ottsville.
 Umstead, J. R., Quakertown.
 Johnson, H. W., Riegelsville.
 Weaver, M. H., Richlandtown.
 Lovett, Henry, Langhorne.
 Wilson, A. S., Bristol.
 Myers, A. F., Blooming Glen.

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 Kutz, W. L., Weissport.
 Davis, D. R., Lansford.
 Long, W. P., Weatherly.
 Erwin, B. S., Mauch Chunk.
 Moyer, L. W., East Mauch Chunk.
 Horn, C. T., Lehighton.
 Seiple, W. G. M., Lehighton.
 Horn, J. A., Mauch Chunk.
 Tweedle, J. B., Box 69, Weatherly.
 Kistler, C. J., Box 566, Lehighton.
 Zern, J. G., Lehighton.
 Kistler, E. H., Lansford.

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 Linaberry, J. S., Bloomsbury.
 Closson, E. W., Lambertville.
 Nash, A. B., Frenchtown.
 Cramer, I. S., Flemington.
 Romine, G. L., Lambertville.
 Knight, M. D., Clinton.
 Sproul, O. H., Flemington.

LEBANON COUNTY, PA.

Bucher, I. R., Lebanon.
 Bucher, J. C., Lebanon.

LEHIGH COUNTY, PA.

Albright, R. E., 458 Hamilton St., Allentown.
 Dickenshied, E. H., 35 North 9th St., Allentown.
 Backenstoe, M. J., corner 5th and Chestnut Sts., Emaus.
 Erdman, A. J., Allentown.
 Balliet, L. B., 7th and Green Sts., Allentown.
 Fetherolf, A. P., 941 Hamilton St., Allentown.
 Brobst, J. A., Macungie.
 Gearhart, E. A., Allentown.
 Cawley, M. F., Allentown.
 Hartzell, W. H., Allentown.
 Christman, J. D., Allentown.
 Hendricks, A. W., Allentown.

Herbst, H. H., Allentown.
 Herbst, William, Trexlertown.
 Hertz, W. J., corner 2nd and Liberty
 . Sts., Allentown.
 Horn, H. J., Coplay.
 Hornbeck, J. L., Catasauqua.
 Hornbeck, M. E., Catasauqua.
 Huebner, I. F., Allentown.
 Keim, C. J., Catasauqua.
 Kistler, N. F., 205 North 9th St.,
 Allentown.
 Kress, P. J., 636 Hamilton St.,
 Allentown.
 Martin, C. S., Allentown.
 Otto, C. J., 404 North 7th St.,
 Allentown.

Peters, R. C., corner 8th and Gor-
 don Sts., Allentown.
 Reichard, P. L., Allentown.
 Riegel, H. H., Catasauqua.
 Riegel, W. A., Catasauqua.
 Saeger, L. J., Allentown.
 Schaeffer, C. D., Allentown.
 Seiberling, F. C., 945 Walnut St.,
 Allentown.
 Seiberling, G. F., Allentown.
 Sowden, R. T., Slatedale.
 Stemmetz, E. G., Hokendauqua.
 Young, R. W., Slatington.

LUZERNE COUNTY, PA.

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 Buckman, E. U., 96 South Franklin
 Street, Wilkes-Barre.
 Cloud, J. H., Drifton.
 Corss, Fred., Kingston.
 Farrell, F. A., 198 South Main St.,
 Wilkes-Barre.
 Guthrie, G. W., 47 South Franklin
 St., Wilkes-Barre.
 Harvey, O. F., Wilkes-Barre.
 Howell, J. T., Wilkes-Barre.
 Johnson, F. C., Wilkes-Barre.
 Keller, H. M., Hazleton.

Kistler, O. F., Wilkes-Barre.
 Knapp, C. P., Wyoming.
 Longshore, W. R., Hazleton.
 MacKellar, James, Hazleton.
 Miner, C. H., Wilkes-Barre.
 Neale, H. M., Upper Lehigh.
 Roe, J. I., Wilkes-Barre.
 Solt, T. J., Mountain Top.
 Stewart, W. S., Wilkes-Barre.
 Stoeckel, Louise M., Wilkes-Barre.
 Taylor, L. H., 41 South Franklin
 St., Wilkes-Barre.
 Weaver, W. G., Wilkes-Barre.

MONROE COUNTY, PA.

Erdman, Mary Greenwald, Strouds-
 burg.
 Hagenbuch, Phebe H. F., Strouds-
 burg.
 Hagerman, John A., Sciota.
 Henry, John, East Stroudsburg.

Miller, N. C., Miller Building,
 Stroudsburg.
 Mutchler, J. P., Stroudsburg.
 Shaw, J. B., Delaware Water Gap.
 Walton, T. C., Stroudsburg.

MONTGOMERY COUNTY, PA.

Bauman, J. E., Telford.
 Bauman, J. Warren, Telford.
 Blanck, Joseph E., Greenlane.
 Groff, J. W., Harleysville.
 Herman, A. C., Lansdale.

Hersh, John G., East Greenville.
 Kriebel, Elmer, Worcester.
 Mensch, J. G., Pennsburg.
 Richardson, D. D., Norristown.

NORTHAMPTON COUNTY, PA.

Andreas, B. A., 508 East 4th St., South Bethlehem.	Klotz, E. J., Northampton.
Apple, S. S., Easton.	Kotz, A. L., Easton.
Beck, C. E., Portland.	Laciar, H. J., Bethlehem.
Berlin, J. O., Bath.	Laubach, F. M., Weaversville.
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Dudley, W. H., Easton.	Malone, D. C., South Bethlehem.
Edwards, H. Threlkeld, South Beth- lehem.	Michler, H. D., Easton.
Engelman, David, Easton.	Ott, Isaac, Easton.
Erwin, F. H., South Bethlehem.	Reichard, N. W., Bangor.
Estes, W. L., South Bethlehem.	Rentzheimer, W. H., Hellertown.
Fox, G. T., Bath.	Roebuck, J. H., Bethlehem.
Frace, P. W., Easton.	Schnabel, E. D., Bethlehem.
Fretz, J. E., Easton.	Seem, A. A., Bangor.
Green, E. M., Easton.	Seip, W. H., Bath.
Hahn, F. J., Bath.	Stout, A., Bethlehem.
Harris, A. J., Hellertown.	Swartz, G. N., Pen Argyl.
Haughwout, B., Portland.	Swoyer, O. D., South Bethlehem.
Hunt, J. S., Easton.	Thomason, W. P. O., Easton.
Kastan, W. H., Chapman Quarries.	Updegrove, J. D., Easton.
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Keller, D. H., Bangor.	Weaver, S. J., Bethlehem.
Keller, J. C., Wind Gap.	Wilhelm, E. T., South Bethlehem.
	Wilson, J. H., Bethlehem.
	Work, R. A., Bethlehem.

NORTHUMBERLAND COUNTY, PA.

McCay, Robert B., Trevorton.	Wenck, Mary McCay, Sunbury.
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SCHUYLKILL COUNTY, PA.

Biddle, J. C., Fountain Springs.	Halberstadt, G. H., 218 Market St., Pottsville.
Brendle, G. F., Mahanoy City.	Hermany, P., Mahanoy City.
Carpenter, J. S., Pottsville.	Hoffman, C. J., Morea Colliery.
Carr, A. P., St. Clair.	Langton, D. J., Shenandoah.
Farquhar, G. W., Pottsville.	Taggart, David, Frackville.
Hagenbuch, J. H., Mahanoy City.	
Halberstadt, A. H., Pottsville.	

WARREN COUNTY, N. J.

Albertson, W. C., Belvidere.	Stites, William, Washington.
Dewitt, J. D., Harmony.	Tunison, G. Orlando, Oxford.
Osmun, L. C., Hackettstown.	Williams, C. M., 11 West Washing- ton Ave., Washington.
Smith, C. B., Washington.	

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 Stevens, C. L., Athens, Pa.
 Sturdevant, D. W., Laceyville, Pa.

NEWS ITEMS.

The governors of the New York Skin and Cancer Hospital, corner Second avenue and 19th street, announce a course of clinical lectures on "Syphilis," by members of the visiting and consulting staffs. The lectures are given on Wednesdays at 4.15 p.m., beginning March 6, and ending May 1st. The clinics are free to members of the medical profession.

Dr. Roswell Park, of Buffalo, N. Y., will be the orator to address the Lehigh Valley Medical Association at its annual (Summer) meeting, Mauch Chunk, Pa., July 27, 1901.

The Medico-Chirurgical College, of Philadelphia, announces a *special quiz course* for the preparation of candidates for the medical corps of the United States army, navy, and marine hospital services, and for state board and hospital examinations. The course will begin March 1st, and continue four months.

NECROLOGY.

Dr. W. G. M. Seiple, of Leighton, Pa., died on March 1st.

PAMPHLETS RECEIVED.

Goelet, Augustin H. M.D., Treatment of Endometritis by Drainage and Irrigation. *Reprint.* The Surgical Treatment of Fibroid Tumors of the Uterus. *Reprint.* The Resources of Modern Minor Gynecology. *Reprint.* Carcinoma Uteri, or Senile Degeneration of the Endometrium? If the Latter, How Shall It Be Dealt With?

LEHIGH VALLEY MEDICAL MAGAZINE.

Vol. XII.

APRIL, 1901.

No. 4.

ORIGINAL ARTICLES.

A CASE OF PENETRATING BULLET WOUND OF THE CRANIUM.

Clinical Notes by W. P. WALKER, M.D., with remarks upon the case,
by W. L. ESTES, A.M., M.D.

C. D., a girl, aged 12 years. About four hours before admission the child was accidentally shot in the forehead by a playmate. The weapon was a pistol, carrying a .22-short cartridge. A dressing was applied and the patient sent to the hospital. On admission January 5th, 7 P.M., examination shows a fairly well-grown and well-nourished child; she is conscious, replies when questioned, but seems slightly stupid unless aroused, seems to have but little pain. Inspection shows a wound on the right side, three centimeters above the superciliary ridge and on a vertical line drawn through the outer canthus of the eye. The ball before striking had turned, so that it struck the forehead sidewise. There is no hemorrhage, but slight escape of brain tissue is present. The direction taken by the bullet seems to be downward, inward, and backward.

The child is somewhat pale, heart action is irregular, no murmurs, pulse of fair quality (80 per minute), respiration negative, pupils equal and react, no paralysis, lungs, liver, and spleen negative; urine, specific gravity 1029, clear, albumin and sugar absent.

The wound and surrounding parts were cleansed and an antiseptic dressing applied. The child had a comfortable night, sleeping most of the time. Slight twitching of the muscles of the right leg was noticed. At midnight, the temperature was 100° by axilla; pulse 80, quite irregular; respirations

20. January 6th, 9 A.M., temperature 98.4°; pulse 69, irregular; respirations 21. Patient has frontal headache, is stupid but will answer when spoken to loudly, is slightly irritable when aroused. No paralysis.

On the morning of the 6th, about 24 hours subsequent to the injury, after the usual preparation for operation, the wound was enlarged; the skull was found to be perforated—cerebral tissue escaping. The opening through the bone was enlarged and the membranes were found rather badly lacerated, the ball having perforated sidewise, as before mentioned, and having carried through a number of bone splinters from the internal layer of the cranium. These bits of bone were found embedded in the brain at a depth of about six centimeters. A number of fragments were removed, as well as disintegrated brain matter, the cavity left being large enough to admit easily the index finger for six centimeters. The track of the ball was downward, backward, and toward the middle line. Reasonable exploration failed to locate it. The cavity was douched with saline solution, and much detritus washed out. It was found that an irregular area of the dura mater, about the size of one's thumb nail, had been destroyed, so the aperture was filled in with gold foil. Iodoform gauze-packing was placed over the foil and the scalp wound closed. At 5 P.M., temperature was 100.2°, pulse 64, respirations 28. During the early part of the night the child was rather restless, and was given sodium bromide, grains xx.

January 7th, 9 A.M., temperature 99.6, pulse 72, respirations 27. The heart action has become much steadier, the patient is quiet, does not speak unless loudly spoken to and requires the questions to be put several times before replying, sleeps the greater part of the time; some photophobia. The temperature remained practically normal from thistime on. January 9th, the wound was dressed. There was some serous retention. The iodoform gauze was removed and all sutures, the wound having healed, except where the packing protruded. The mental condition remains unimproved, the child being quite stupid. The tongue is protruded to the right; no facial paralysis. January 10th, no change noted, except more marked deviation of the tongue. January 16th, the dressings were changed. The gold

foil was found displaced and there was bulging outward at the site of the dural wound, evidently caused by a hernia cerebri. The gold was removed and a gauze pad placed over the prominence. January 21st, the right pupil is larger than the left, reacts sluggishly, and there is slight relaxation of the muscles on the right side of the face. There is some incoordination of the right arm. On January 24th, the child complained of nausea and vomited several times; otherwise there was no particular change. By February 1st, the paralysis of the face muscles had increased slightly, there was more incoordination of the right upper extremity, and the child still remained quite stupid. The hernia cerebri has increased a little, is about the size of a marble. It was decided to operate for the relief of the hernia and on February 1st it was dissected from its bony and fibrous investments and replaced. The intracranial pressure was enormous. The aperture in the bone was filled in by a hard rubber plate, inserted just under the bony margin. February 2d, highest temperature 98.8°. The facial paresis is less marked and mental condition is better.

From this time on until discharge, February 19th, the child improved in every way. The facial paralysis disappeared entirely, and the child became as bright mentally as before the injury.

REMARKS.

Tolerance of the cerebrum to injuries is now so well-known that only remarkable examples of this, or some special feature in the injury or treatment make these cases particularly interesting and profitable to the profession at the present day. The case of the girl who was recently treated in St. Luke's Hospital, and whose clinical history is given by Dr. Walker is, I think, sufficiently remarkable as to the severity and extent of injury, and exhibits the good effect of returning and controlling a hernia cerebri so conclusively that I think it well worth reporting, and the careful consideration of general practitioners.

A .22-calibre bullet, at short range, penetrated the cranial cavity of the girl and, as is usual, made a fairly clean perforation of the external table of the cranium, but splintered the inner table and drove several sharp spicules of bone into the cerebrum; as

indicated in the notes, some of these spicules were found about six centimeters from the surface of the cranial walls, deep down in the cerebrum. The brain had a cylindrical lacerated area which led downward, inward, and backward. After carefully washing out the detritus, consisting of blood, lacerated brain tissue, and pieces of bone, with a hot normal saline solution by means of an irrigator, a cavity was left which easily admitted my index finger and with this finger and probes I sought in vain for the bullet. My finger passed into the cerebrum in the direction of, and almost to, the lateral ventricle and, while the lacerated area seemed to extend further, I was unwilling to follow it because of the danger of penetrating into the lateral ventricle. Exploration by probe and grooved director was done in every direction around the lacerated area and as deep down towards the corpus striatum as I thought at all safe and expedient, but I could not find the bullet. After carefully washing out the cavity again with a gentle stream of saline solution, closure of the cranial cavity was next undertaken. The membranes were entirely destroyed, so I replaced them by some layers of thick gold foil which I attempted to anchor by inserting it under the inner table and fitting it into the irregularities of the bone; this was difficult to do, as the opening had been enlarged by rongeur forceps and was rather small, and was decidedly irregular. A bit of iodoform gauze was laid over this foil to give it stability; the end was brought out at the external angle of the wound. Then the scalp was brought over this and sutured. After this a compress of iodoform gauze was applied, and over all an aseptic dressing. Capillary drainage was employed at the external angle of the wound by means of the projecting end of the iodoform gauze piece over the gold foil.

The child bore the operation well and reacted quickly. She was somnolent, but seemed less stupid than before the operation. No special physical sign of paralysis or compression appeared until after the first dressing on the 9th, three days after the operation. At this dressing, the gauze piece, which was laid over and held down the gold foil, was removed, as well as the sutures in the scalp. The next day the child was quite stupid—she could be aroused, but lapsed quietly into somnolency. When her tongue

was protruded it deviated towards the right. Her condition remained about the same until the 16th when the second dressing was done. The wound in the scalp had healed, but there was a protrusion of the cerebral tissues through the opening in the cranium. Evidently the intracranial pressure had dislodged and driven the gold foil out of its place. Investigation showed this to be true, and as the foil was doing no good it was removed through a small opening made between the flaps for this purpose. The hernia cerebri was reduced and a compress of iodoform gauze placed over the opening in the bone to hold it in, and this was bandaged firmly in place. Her condition continued practically unaltered until January 21st, when it was noted that the right pupil was larger than the left, and that it reacted very sluggishly to light; there was also slight paresis of the right side of the face, and there was some incoordination of the muscles of the right upper extremity. By the 26th, the face was decidedly paralyzed on the right side, and the incoordination in the right upper extremity and the right deviation of the tongue were increased; the child began to vomit occasionally and her mental condition was worse. It was impossible to obtain the hernia by the means we were trying to employ, *viz.*, compresses and bandages, and the hernia was becoming steadily larger. It was evident something further must be done. The child had grown quite weak. I thought her condition did not admit of another extensive operation; there were no signs to indicate a definite location of the bullet. I decided to try to replace and retain the prolapsed brain tissue.

On February 1st, 25 days after the first operation, I separated the scalp from the hernia and the hernia from the bony perimeter of the cranial opening by a careful dissection and pressed the protrusion back into the cranial cavity. I found the intracranial pressure remarkably strong, so great was it that I suspected some fluid—serum or pus—beneath the opening, but I could find no evidence of it, other than the extreme pressure. I had prepared and sterilized a piece of flat flexible rubber, such as is used by dentists for taking impressions and making plates for teeth; I placed this over the hernia and slipped its edges under the bone, around the whole opening, and care-

fully pressed it down upon the hernia. The flexibility and plasticity of the rubber was sufficient to make it easily adapted to the opening and the surroundings, and when it was properly flattened out it was quite stiff enough to hold the hernia solidly in place. The scalp was sutured and the usual dressings applied. No drainage was used.

There was almost immediate improvement in the condition of the child. In a few days the facial paralysis was almost gone, the deviation of the tongue improved, and the incoordination disappeared, and the child became bright and cheerful; vomiting ceased. She left the hospital on February 19th, walking without difficulty, no paralysis, no incoordination, cheerful, and apparently as bright as she had ever been.

Many satisfactory points are brought out by this child's case:

(1) A very extensive wound of the cerebrum may have careful and prolonged and extensive investigation without bad results, provided asepsis be maintained.

(2) A physiological manifestation, namely, a right side paralysis with an extensive injury of the second cerebral convolution on the right side, from a bullet track toward the right corpus striatum.

(3) All paralytic manifestations disappeared, and the mental faculties returned by replacement and proper control of the hernia cerebri. The former and usual treatment of a hernia cerebri was excision of the protruding "knuckle" or nodule of the brain. I found the rubber plate an excellent expedient for closing the cranium. It is not an original expedient at all, but one to be recommended.

The probabilities are, inasmuch as the motor areas were so much involved, that epileptic attacks will occur later on. The case will be watched for any manifestation of this kind.

Lehigh Valley Medical Magazine

THE OFFICIAL ORGAN OF THE
LEHIGH VALLEY MEDICAL ASSOCIATION.

W. P. WALKER, M.D., Editor.

W. H. DUDLEY, M.D., Business Manager.

The LEHIGH VALLEY MEDICAL MAGAZINE is published monthly by the Lehigh Valley Medical Association as the organ of the profession within the boundaries of the Association.

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EDITORIAL.

Anent Fees.—That “the laborer is worthy of his hire,” is a sentiment which has received the approval of the Great Physician Himself. That too often the worthy physician fails to receive a just recompense for his services is proved by the universal experience of the craft. That because of this, many fall by the wayside, and make use of methods not to be commended, is too common an observation to require demonstration. That the method of estimating the pecuniary value of the physician's service is the same as has prevailed among the profession for centuries is another statement that will be accepted by all. That during this time, the entire methods of transacting business and regulating charges have been changed, most students of history admit. That the present age is an age of intense commercialism whose processes have made inroads upon professional methods likewise may be accepted as self-evident. One of these invasions that has attracted the attention of the profession of late, is

the question whether the specialist shall share his fee with the general practitioner. Arguments have been advanced in favor of such procedure, as being perfectly right and natural. On the other hand, it has been urged, and seemingly with the semblance of right, that this division is neither politic nor desirable. Those who argue in favor of the plan call attention to the fact that the family physician has a large share of the responsibility, and must give much skilled service without receiving any adequate compensation, while the consultant who receives the bulk of the fee is relieved largely of care and responsibility, which he must have, were the case his alone, and for which, in this event, he would receive no additional fee. On the other hand, there is a repugnance among men of refined sensibilities to accept that which savors of a division of spoils.

An editorial article in the April issue of the *Cleveland Journal of Medicine* makes a suggestion in this connection which is worthy of the careful consideration of every physician recognizing the facts as stated above. It suggests that the condition is brought about by the method of estimating the services of the general practitioner. He receives so much a visit, regardless of the value of his visit. The same number of visits in attendance upon a patient slightly sick with measles is valued as highly as those given to a patient seriously ill with typhoid fever. This, according to the *Cleveland Journal*, is altogether wrong, and the services of physicians should be valued by the service rendered, and not after the per diem fashion. Thus, it says: "Let the charge for caring for a case of measles be from \$10 to \$50, according to the severity and complications of the disease, and for typhoid, the charge might be from \$50 to \$200, according to the circumstances of the case, the fee being for the work rendered, and not for the number of visits paid." It suggests that a committee of physicians could fairly prepare a fee bill upon this principle, so that there would be justice alike to the physician and to the patient, and to this could include some such provision as this: "For sharing the responsibility of urging surgical intervention, 25 per cent. in addition to the fee charged by the surgeon." In this way, compensation would be given to the family physician in a fair and open way, not as a quasi-bribe

from the consultant, but as a part of the charge to be paid by the patient.

We confess that the plan is a novel one, and yet at the same time, it appears to have the principles of equity in it, and we suggest that the matter be carefully considered by the physicians over the land, discussed in our medical societies, and if it is, as it appears to be, a direct advance in the method of conducting the financial side of one's practice, let us adopt it by all means.

NECROLOGY.

Dr. W. G. M. Seiple died at his home in Lehighton, March 1, 1901. He was the son of Mr. and Mrs. Samuel Seiple, and was born at Hokendauqua. His parents moved to Allentown while he was still a boy, and he acquired his early education in the schools and academy of that town. He graduated from the Medical Department of the University of Pennsylvania in 1866. Immediately after his graduation, he practised for a time in Egypt as Dr. Kohler's partner. Afterward he located at Guthsville, where he was the physician at the county hospital for nine years, during which time he married Miss Sophia Miller, who survives him.

In 1876 he moved to Philadelphia, but left the city on account of poor health in the fall of that year and located at Lehighton, where he was practising at the time of his death.

Dr. Seiple was a member and ex-president of the Carbon County Medical Society. He was a member of the Lehigh Valley Medical Association and of the State Society. He was a successful practitioner and highly esteemed as a consultant among the neighboring physicians. His generosity and public spiritedness endeared him to all, and his death means a real loss to the community.

J. H. B.

PAMPHLETS RECEIVED.

Roberts, John B., M.D., Philadelphia. "The Operative Treatment of Ugly Ears." *Reprint*. XXX "Two Cases of Epiplopesy in Cirrhosis of the Liver." *Reprint*.

LEHIGH VALLEY MEDICAL MAGAZINE.

Vol. XII.

MAY, 1901.

No. 5.

ORIGINAL ARTICLES.

A FEW NOTES ON THE SULPHOCARBOLATES.¹

BY EDGAR MOORE GREEN, M.D., Easton, Pa.

My attention was first called to the sulphocarbulates by a formula which was recommended a few years ago for the treatment of intestinal indigestion. It consisted of sodium sulphocarbolate and naphthol-benzoate. I found upon trial that this combination acted very nicely as an intestinal antiseptic. I determined, however, if possible, to find out which of these two remedies was the more useful and whether it was necessary to have the two combined in order to have the proper result. The combination of these two drugs certainly seemed quite effective in the correction of those fermentative attacks of indigestion, which are so common among certain classes of patients. Naphthol-benzoate did not seem to have very marked effect in my hands when used alone. Sodium sulphocarbolate, however, has seemed to be one of the best remedies when used for the correction of flatulence. I think that you will agree with me that only a small proportion of our dyspeptic cases suffer primarily with any gastric trouble. Most of them have the intestinal forms of dyspepsia due to a lack of proper mastication of food, to too large quantities of starchy food, to too rapid eating of meals, and to the devouring of sweets and knickknacks between meals. In a case of this kind it seems to me that the fermentation begun in the stomach, is increased in the small intestine with the production of large quantities of gas, and more or less pain in the abdomen. In such cases the distress does not begin until some time after the meal, one and a half to two or three or even four hours. It is in cases of this

¹ Read before the meeting of the Northampton County Medical Society.

kind that I think the sodium sulphocarbolate is particularly helpful. It is thought that pancreatin is indicated or perhaps taka-diastase in order to digest the starchy elements of the food, but before these remedies can do their full work, I think sodium sulphocarbolate should be given to relieve the abdominal distress.

Sulphocarbolic acid, from which the sulphocarbolates are formed, is made by mixing equal parts of sulphuric and carbolic acids. The different sulphocarbolates have been introduced as medicines with the idea that they would unite the properties of these two acids.

The following summary of the chemistry and therapeutics of some of the sulphocarbolates has been taken from Dr. Phillips' "Materia Medica and Therapeutics."

"Sulphocarbolate of sodium is prepared by neutralizing sulphocarbolic acid dissolved in six times its bulk of water, with sodium carbonate, afterwards evaporating and crystallizing.

"It occurs in brilliant, colorless, rhombic prisms, cohering in rosettes. It has a slightly saline and bitter taste, no odor; is freely soluble in six times its bulk of cold, two-thirds of boiling water; slightly soluble in alcohol, not in ether. The watery solution is clear, and does not precipitate with a salt of barium, since the sulphocarbolate is stable; strong heat will, however, expel the carbolic acid, and then the solution will react with barium, like other sulphates. Perchloride of iron gives a violet color.

"If the crystals be dissolved by boiling in nitric acid, and double the amount of water added, picric acid is precipitated in yellow scales, containing a quarter of their weight of carbolic acid.

"The sulphocarbolates of ammonium, potassium, magnesium, and calcium crystallize in acicular tufts, more or less white; the analogous salt of copper, in transparent, light blue prisms; that of iron, in small, brown, micaceous crystals; of zinc, in colorless rectangular plates.

"Sulphocarbolate of sodium is readily absorbed, and is, apparently, decomposed in the blood, since the odor of carbolic acid is soon communicated to the breath, while sulphate of so-

dium passes in the urine (Sansom). On examining the tissues of two guinea-pigs that had taken nearly 300 grains in four days, the sulphate was detected in the liver, muscles, etc., but neither carbolic nor sulphocarbolic acids were evident to tests. It is probable, however, that some free acid passes in the urine, as well as in the breath.

"Any special powers of the alkaline sulphocarbonates over the nervous and circulatory systems have not been ascertained; 20 grains taken in water, and repeated several times at short intervals, produce no definite symptoms, and 60 grains given every four hours for several doses cause only slight dizziness or vertigo. The administration of these salts, however, offers an indirect method of giving carbolic acid, and doses much larger than those mentioned would, probably, develop some of its effects; these alkaline compounds, however, have less local irritant action, and up to the present time have not caused poisonous symptoms.

"As direct antiseptics, the sulphocarbonates do not rank high; the soda-salt, however, arrests fermentation more actively than the others."

At this point it should be said that the U. S. Dispensatory states that the sulphocarbonates are probably "inert." To this statement I must humbly take exception; and it was with the idea of calling these salts to your attention that I have come before you to-day. Sodium sulphocarbonate may be given in doses of from 10 to 30 grains. In my own practice, however, I have seldom given more than 5 or 10 grains in each dose. A dose of this size given after meals and at bedtime is very often helpful in cases of intestinal indigestion with flatulence.

Very frequently *cascara sagrada* is indicated in combination with it, because almost all of these patients are more or less troubled with constipation. In many cases the sulphocarbonate can be given with advantage between meals, say at intervals of two hours in order to correct the flatulence which exists almost constantly throughout the day. This method of administration has been very helpful in my hands. I think, however, when in pill form, especially with an enteric coating, that the sulphocarbonate is more apt to reach the spot and do its work satisfactorily. For this purpose I have had Parke, Davis & Co. put up

for me four-grain pills of sodium sulphocarbolate and two and a half-grain pills with this coating. Ammonium sulphocarbolate I have also used in pill form, enteric coating, and found it very helpful. In fact in some cases its effect seemed to be more prompt than that of the sodium salt.

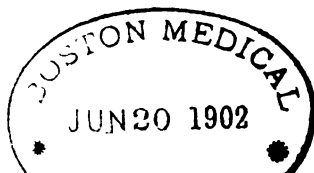
Another combination that has seemed to me to be a useful one, is that of acetanilide and sodium sulphocarbolate. It is a well-known fact that antifebrin, or acetanilide, is more soluble and consequently is more rapidly absorbed and therefore more promptly effective when given in combination with some alkaline salt. Acetanilide was first tried by me in combination with sodium sulphocarbolate in the proportion of 85 per cent. of the former with 15 per cent. of the sodium salt. This I think was the proportion in which sodium bicarbonate was originally combined with acetanilide in the manufacture of the well-known Antikamnia. This combination seemed to work very well, but after a little experimentation I found a smaller proportion of acetanilide was quite as effective or even more so. The combination finally decided upon was 50 per cent. of each in powder form to be given in three- or five-grain doses. This would give in each dose one and a half or two and a half grains. The primary reason for combining the sulphocarbolate with acetanilide was to render the acetanilide more soluble and also because the sulphocarbolate seemed to me to be the better corrective of various forms of fermentation. This it seems to me to have accomplished. And after several years of trial with this combination I think I can safely say that the smaller doses of acetanilide given in this way are quite as effective in my hands as the much larger doses that are usually given. I do not think that it is a common thing to see a severe headache relieved with five grains of acetanilide. Given with sodium sulphocarbolate, it is a very common experience for me to find headaches relieved promptly with a five-grain powder of the combination, repeated in a half hour or hour. So prompt has been the effect very frequently from this combination that I have had patients to ask if the powders did not contain morphin, and this question has been asked when only three grain-powders were being administered. The great advantage of this combination is that one

always feels that the acetanilide is being used in a perfectly safe dose.

With regard to the other sulphocarbulates, I am not able at present to make any report except perhaps concerning the zinc salt. I have used some of the other salts to some extent but too little to make any statement with regard to them as yet. Sulphocarbonate of zinc has been so freely used by many of the profession, as to need hardly any mention at this time. Its use in dysentery and various diarrheal conditions has been frequently spoken of. It has been very extensively used by me in various diarrheal cases, especially those of a chronic nature and has proved most effective. I may mention one case of a lady who had suffered from chronic intestinal catarrh for a number of years, but whose condition could not be relieved by any of the usual remedies. Copper sulphate, copper arsenite, tannic acid, and various other remedies were tried with no permanent result.

Sulphocarbonate of zinc was finally combined with tannic acid in the treatment of this case. The tannic acid was gradually removed from the treatment. Within a very few weeks the condition of the bowels was entirely corrected and now after four or five years' interval, there has been no return of the diarrheal trouble.

It was not my intention, however, to do more than bring to your attention at this time a few of the salts of sulphocarbolic acid which are not generally used. As before stated, the sodium and ammonium salts are the ones from which I have had the best effects thus far, except in cases of diarrheal trouble where sulphocarbonate of zinc has been extremely helpful.



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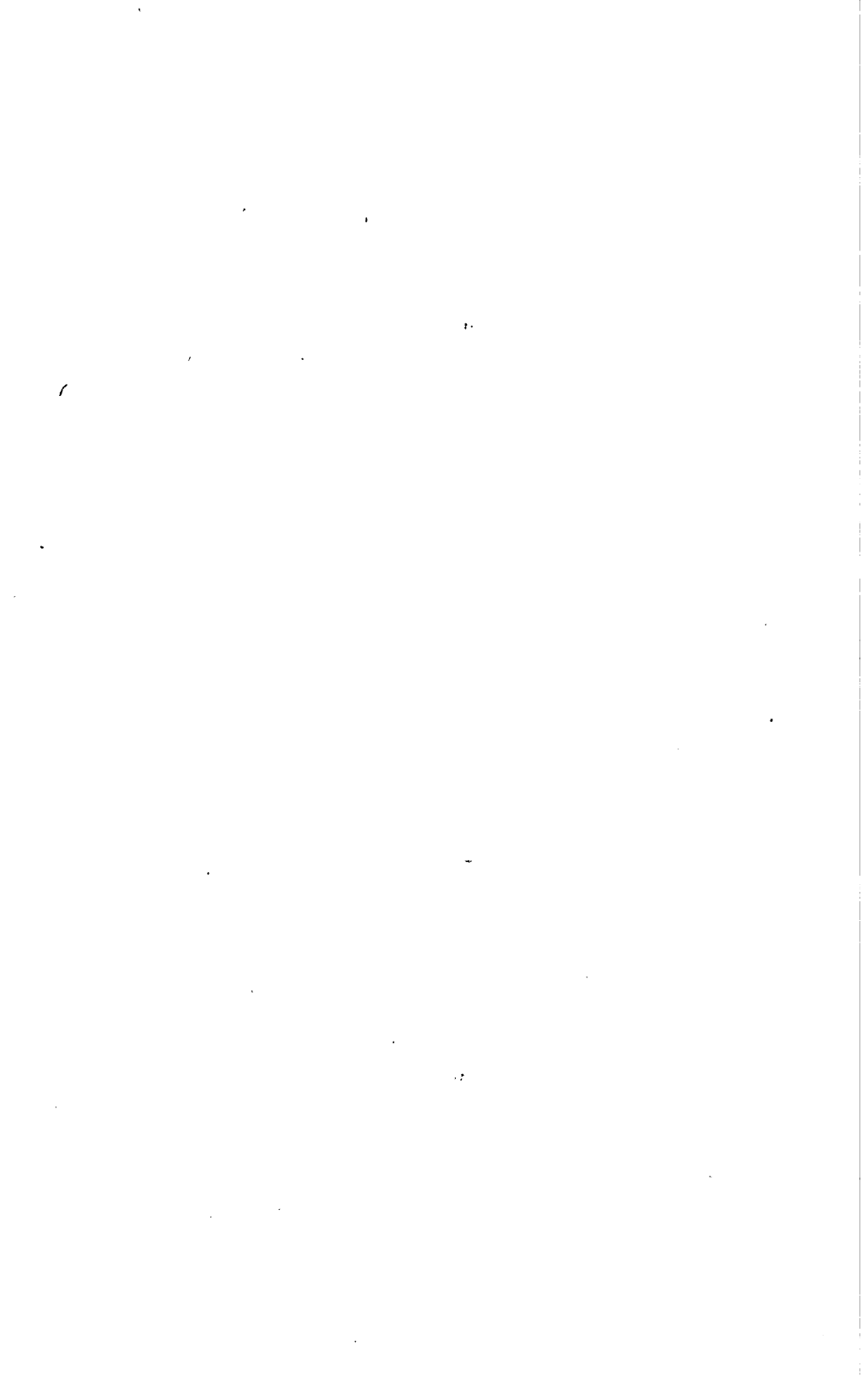
Office of Publication, 104 North Fourth Street, Easton, Pa.

EDITORIAL.

The Legislators at Harrisburg, with apparent seriousness, are discussing the question of a removal of the Capitol from that city. Whether this is for an ulterior purpose, is a little by-play of humor to lighten the heavy weight of care, or a sincere proposal, is difficult to determine. For the traditional legislator resembles "Old J. B." in that he is "devilish sly." But whether in jest or earnest, there is a suggestion made in connection with this movement that is far too serious a matter to treat of jestingly. It is proposed to make over the present building to the trustees of the State Hospital for the Insane to be converted into a hospital building. When the mentally alienated were incarcerated in old Bethlehem Asylum, and Bedlam received its present-day significance, such a proposition might have been thought to be magnanimous. It speaks ill for the intelligence of a man to suggest this plan seriously; it shows his lack of the

finer sensibilities if it were merely a jest to suggest a building so manifestly unfit for the care of the insane.

Would it not be wiser for the medical profession to take the statement seriously and protest against even the thought of the old Keystone providing for its insane anything short of what modern psychologists have shown to be the best for their care and favorable for their restoration to mental soundness?



LEHIGH VALLEY MEDICAL MAGAZINE.

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No. 6.

ORIGINAL ARTICLES.

SOME LESSONS FROM RECENT OPERATIONS.

BY DR. W. L. ESTES, M.D., South Bethlehem, Pa.

Laparotomies or celiotomies are so common and so uniformly without fatal result nowadays, that if some extraordinary condition does not exist, they are hardly worth taxing the patience of a medical audience unless they are done for some of the conditions which have quite recently been recognized as opening up new fields for abdominal surgery or are operations having some unique feature in technique or complication.

In the endeavor to cull from the list of recent operations at St. Luke's Hospital a few which might serve as a profitable basis for study and comment, I noted that from May 1, 1900, up to the present time there had been 95 celiotomies, divided as follows:

		Deaths.
Appendectomies	20	0
Removal of uterine appendages (frequently the vermiform appendix also)	14	0
Removal of uterine appendages, vermiform appendix with intraligamentous cyst	1	0
Explorations of abdomen	10	0
Radical cure of inguinal hernia	11	0
“ “ “ umbilical “	2	0
Strangulated herniae	7	0
Ventrofixation of uterus	1	0
Hysterectomies (including removal of appendages and frequently intraligamentous cysts)	8	0
Cholecystotomies (<i>Note</i> .—The case which died was in a very low condition when admitted, from sepsis. He had empyema of the gall-bladder)	6	1

		Deaths.
Ovarian cysts	2	0
Extrauterine pregnancy	2	0
Large cyst of pancreas, following injury.....	1	0
Gastroduodenostomy.....	1	0
Washing out abdomen and suturing perforation of ilium for perforating typhoid ulcer.....	1	1
Acute intestinal obstruction.....	8	5
	<hr/> 95	<hr/> 7

You will note that the cases of intestinal obstruction have furnished nearly the whole mortality. This is not to be wondered at, or I had better say that these cases are frequently fatal and one cannot wonder if he reflects that too frequently operations are postponed until the patient is almost moribund and the operation is simply undertaken as a last resort, with the idea of giving the last chance to an individual almost at death's door. My experience in cases of intestinal obstruction serves as an awful warning to physicians not to delay calling in a surgeon until every other means have been exhausted. Nowadays a physician should consider it his duty to associate with himself a surgeon, in managing these cases, at the very earliest possible moment after he has determined that any given case is one of intestinal obstruction. Personally I never feel like declining to operate even in cases of *extremis* because some wonderful results have followed, but these marvelous results are very exceptional and are not to be expected. Whenever a case has resisted all proper efforts to restore the function of the bowels for twenty-four hours, even if it is in a good condition and has had no fecal vomiting, a surgeon should be called in in order to consult about the advisability of an operation. In this connection I wish to urge the absolute harmfulness of administering drastic cathartics to cases of intestinal obstruction. Very mild laxative—small doses of calomel frequently repeated, followed by dram doses of magnesium sulphate every hour for four or five doses—I have found least harmful. If these laxatives do not act it is better to trust to repeated high enemas. A recently suggested experiment to be used in cases of obstruction after abdominal operations (I think recommended by Dr. Pryor, of N. Y.) is the introduction of oxygen gas under pressure into the intestines through

the rectum. The oxygen gas is valuable not only as a distending agent and thus may loosen adhesions, straighten out twists, loops, and reduce intussusceptions, but it also has a beneficent chemical action in oxidizing organic accumulations and thus prevents septicemia.

Three of the cases of obstruction resulted from carcinomas of the colon. Two of these cases were men and one was a woman. I exsected the growth in two cases and made artificial ani and in the other case left the growth and made an artificial anus because of the bad condition of the patient, who had almost universal adhesion of his intestines to one another and to the abdominal walls.¹ In two of these cases the descending colon was involved, and in the other the ascending portion near the hepatic flexure was the part affected. Exsection of the growth and reunion of the gut is an exceedingly difficult operation in the ascending and descending colon, because of the shortness of the mesocolon and the contractions which ordinarily occur on account of the growth. It is better in these portions to exsect the growth and make an artificial anus by sewing the ends of the gut to the skin through a small wound made in the region of the growth.

The special point I wish to make in recounting these cases is a suggestion of diagnosis. It has been my fortune to see a number of cases of carcinoma of the colon. I have invariably found them in middle-aged people; men are affected more frequently than women, as a rule. They are accompanied by a long series of indigestion symptoms, progressively increasing constipation, not much emaciation as a rule, very little cachexia, and scarcely any local pain to indicate their locations. As they are usually situated deep down in the lumbar regions it is very difficult to find them. In a middle-aged man who gives the history of having "trouble with his stomach" for several months (slow and difficult digestion with belching and gaseous distention) and who tells you he is becoming more and more constipated, and that he has had two or three periods of almost complete stasis of the bowels with great distention of the abdomen and colicky pains in the abdomen, perhaps accompanied by vom-

¹ Two of these cases died, the other recovered.

iting for a few hours—and then complete relief after a full evacuation of the bowels, I would advise you carefully to explore the lumbar regions for an obscure tumor, and finding this advise an operation at once. If the tumor is not found watch the case very closely and if he develops symptoms of obstruction advise operation at once.

Gall-stones are very common. I find that the more I see of these cases the firmer my conviction grows that early operations should be done for their relief. Indeed I believe in the near future hepatic colic will be regarded as a purely surgical condition, and that operations will follow close upon any attack which results in jaundice. Seven colicky pains in the right hypochondriac region, vomiting, jaundice, and then a succession of chills or chills recurring at irregular intervals, with malaise, and fever occasionally ; these conditions demand operations. The cases we have had to deal with this year have most of them been very serious and difficult cases. In one case the stone had ulcerated through the walls of the gall-bladder and had entered the liver and was found at the operation within a suppurating cavity in the right lobe of the liver. An uncomplicated case of gall-stones operated upon early is a comparatively easy operation and results in a rapid recovery as a rule ; cases of long standing have adhesions to the omentum and to the neighboring viscera, cause supuration, and frequently sloughing within the gall-bladder, and make very difficult and trying operations and as a rule are followed by tedious convalescence.

The two cases of extrauterine pregnancy were both interesting in themselves, and because they represented very opposite types of this exceedingly dangerous condition. One was in a girl of only 15 years of age. It was a ruptured tubal pregnancy. It had been diagnosed, as it well might be, as a case of appendicitis. I was myself greatly puzzled by the case before operation. I recognized the tumor as being in the broad ligament, but tubal pregnancy never occurred to me and I was astounded to find the hematocele and ruptured tube. The other case was in a woman of 38 years of age, who gave the history of a cessation of menses for seven months and then a violent attack of pain in the abdomen and a serious illness which was also thought at

that time to be a case of appendicitis. This was about a year before she came to the hospital for operation. She had recovered from her acute attack, was able to be up and about, but with an enlargement about her uterus and a good deal of chronic pelvic pain. Regular menstrual flow had been established. The physician who brought her to the hospital had diagnosed an ectopic pregnancy. Examining her before operation I found a cyst in the right broad ligament and a mass which moved with the uterus and seemed a part of the uterus extending upwards to the left. I concluded she had uterine myoma and an intraligamentous cyst. Upon opening the abdomen, at the time of operation, I found the omentum firmly adherent and covering in the whole pelvis and binding the intestines to the pelvic organs and to the parietal peritoneum. After exsecting the omentum I found two tumors; namely, the cyst in the right broad ligament and another which was hard and firm, and which I still thought was the uterus containing a fibroid, occupying the middle and left side of the pelvis. Everything was matted together firmly in the pelvis. The sigmoid flexure of the colon, the cecum and appendix, and the rectum were intimately connected with the tumors, besides firm adhesions to the mesentery. In trying to separate these adhesions I cut into a sac and evacuated some clotted blood; this gave me the first inkling of the true condition of affairs. I soon came upon a receptacle containing projecting bones and finally disclosed the adventitious sac which contained a mummified fetus and old blood clots (the fetus is thought by Dr. Kotz to be a five months' fetus). This sac was intimately connected with the left horn of the uterus, and the anterior fold of the broad ligament covered it in front; it had ruptured through the posterior part of the broad ligament and was united firmly to the rectum and pelvic peritoneum. It required an extensive and very careful dissection to separate the sac. It was necessary to remove the uterus to be able to clear out all the sac and to get at the cyst in the right broad ligament. Finally the whole mass, with the cyst, was removed. The pelvic parietal peritoneum had been very extensively separated, the large vessels and the right ureter were bared but luckily were not injured. Notwithstanding the extensive dissections the

woman had no bad symptom afterwards, and though she is not yet out of the hospital—the operation was done a little over two weeks ago—she is making a rapid recovery.

The early diagnosis of an ectopic pregnancy is sometimes very difficult, but no condition is more dangerous and the necessity of an early operation in few other conditions is more imperative. Cessation of the menses in a woman who had previously menstruated regularly, with the usual early signs of pregnancy and then persistent and increasing pain in the second month in the pelvis which is aggravated by walking, standing or lifting, frequent desire to pass water, and an intermittent discharge of bloody mucus from the uterus would lead one to suspect this condition. I have found the condition in women who have borne children and then had no pregnancy for several years. In such cases and with the above symptoms a careful examination ought to be made, when, if a round elastic tumor in one or the other broad ligaments, a soft enlarged cervix with *patulous* os, and uterus only very slightly enlarged are found, and the blue vagina, enlarged breasts, together with the usual subjective symptoms are present, I think it would be well to prepare the woman at once and operate as soon as practicable.

One of the latest triumphs of surgery has been the saving of many lives by operation after perforation in typhoid fever. Johns Hopkins Hospital has probably taken the lead in performing these operations. In a paper published only a short time ago, Dr. Osler took strong grounds in favor of operation even in apparently hopeless cases. As I have not his paper at hand I must quote from memory. I think he gave 11 cases of operation, with 6 recoveries, done at the Johns Hopkins Hospital in the last year or two. He showed what has been my experience in two cases, that a patient's condition is not made worse by the operation, that even desperate cases stand the operation very well, and that apparently hopeless cases may sometimes be saved. A search through the records show that since the 1st of May, 1900, up to the 13th of May of this year, St. Luke's Hospital has had 22 cases of typhoid fever. 14 of these were admitted since December 1st last. Of these, 12 have recovered, 5 have died, and 5 are still in the hospital and will probably recover. Of the 5

deaths, 2 occurred from perforation and 1 from large and repeated hemorrhages. One case had several large hemorrhages and yet made a complete recovery. One of the perforations occurred while the patient was in the hospital. It happened at night and was not recognized until the next morning when the patient was in a moribund condition and too late to operate. The other case was a very interesting and instructive one. A young man, 17 years of age, of previous good health, while attending Lehigh University, was attacked the latter part of February with what seemed to be the so-called winter cholera or intestinal gripe which was so prevalent for a time in Bethlehem. He was treated by Dr. J. H. Wilson, was not very ill, and after about a week was able to return to college, though he was not feeling well nor strong. Not being able to continue his work profitably he went home for a week or more and returned to college feeling better, but not well; a short time after his return he called to see Dr. Wilson, again complaining of feeling weak and good for nothing. In a day or two Dr. Wilson was summoned to see him at his lodging and found him complaining of severe abdominal pain; he had only a little fever, and had no signs of collapse. The next day his condition was very much worse and the indications pointed to a very serious abdominal involvement. Dr. Wilson at once suspected what had taken place and ordered him removed to the hospital. He was admitted March 28th, about a month after the beginning of his first illness. I was absent the day he was admitted. He was seen by Dr. Walker when he arrived at the hospital, and Dr. Walker concurred with Dr. Wilson in the belief that perforation had taken place. His condition improved somewhat during the day and operation was deferred. I returned in the evening and saw him very soon after my return. After an examination I was also convinced it was a case of perforation. At this time the boy was very weak, pulse 140 and very weak. Notwithstanding his extreme condition, with Dr. Wilson's concurrence, I determined to operate. Under ether the usual median incision was made, and as soon as the peritoneum was opened there was a tremendous gush of liquid fecal matter and quantities of sero-pus. The whole abdomen was full of fecal matter mixed with serum and pus; the intestines were

matted together by recent adhesions, but easily separable. The perforation was quickly located about a foot from the ileo-cecal valve. It was a large opening, easily admitting the tip of my thumb. The opening was rapidly closed by a double row of Lembert sutures and the abdomen thoroughly washed out by large quantities of hot normal saline solution. He became quite weak, almost exhausted, before the operation was completed, but he reacted under hypodermoclysis and active stimulation hypodermatically of strychnin and digitalis. He passed a fairly comfortable night and his pulse became stronger and of fairly good quality. The next day however, he showed that he was profoundly septic, and died in the early afternoon of acute sepsis. The operation gave him a few hours of comparative comfort and improved his condition, but the issue was almost a foregone conclusion. All observers and operators agree that in these cases an early, immediate if possible, operation is the necessity. Keen gave it as his opinion some time ago that it was best to wait for twelve hours and if then the case was not hopeless and had reacted from the first collapse of the perforation, then to operate. Since then he has quite changed his mind as a mass of statistics have shown that operations done immediately after perforation give the best results, and that comparatively few cases survive when operated on twelve hours after the perforation. In every case of typhoid fever the nurse should be instructed after the second week to watch carefully for manifestations of sudden violent pain in the abdomen, accompanied by or followed very soon by signs of collapse or great weakness. To the physician besides the foregoing signs and symptoms, a tense abdomen, not always a distended abdomen, but rather a spasm of the abdominal muscles, especially the rectus muscle, increased tenderness upon pressure over the abdomen, especially low down on the right side, dullness in the flanks, vomiting, and great restlessness would be further, and evidence enough to suggest at once an exploratory incision. If no perforation had taken place statistics show that the incision adds almost nothing to the gravity of the condition, and in several cases the patients have been saved from an impending perforation by the operator finding an ulcer already gone through all but the serous coat and bulging this almost to

bursting. Prompt sewing up of the ulcerated spot saved the patients.

Besides these abdominal operations there have been two nephrectomies recently which I think are of sufficient interest to deserve brief mention and record. Both these cases suffered from aching pains in the lumbar region for many months, had very little disturbance of their urinary functions which they could appreciate, they became anemic, lost flesh, and became so weak and ailing they were not able to continue their work. Examination of the urine showed pus, blood, and albumen. X-ray photographs taken of the first case was a poor result, but there was a suspicion of a small shadow in the kidney. Exploration showed a stone filling the whole pelvis of the kidney. The kidney was enlarged and there was such dense adhesions to the perinephritic fat that it could not be separated from the kidney capsule without tearing the kidney. The organ seemed so far degenerated that I concluded to remove it in toto, which I did. The patient made a good recovery. The second case, which was operated on only two weeks ago, was also photographed by X-rays. I did not see the plate as it was accidentally broken very soon after the negative was made. I was told by the photographer, however, that there was no sign of a stone. I thought I could feel an enlargement, however, in the locality of the kidney, and taking the symptoms into consideration, and as the man was very anxious to have something done, I agreed to explore. I made this exploration under chloroform and found a very much enlarged degenerated kidney, simply filled by a large concretion. The perinephritis had been so extensive in this case and the degenerated kidney was so large that I found I had to remove the organ and the whole of the investing fat *en masse*. This required exsection of the twelfth rib and a prolongation of the incision downwards and forwards almost to the anterior superior spine of the ilium. Even after this very extensive opening had been made, removal of the organ was extremely difficult because it was firmly adherent to the peritoneum in front and to the diaphragm above. Careful dissection was required to separate the kidney from these structures. Fortunately I was able to make the separation without opening the peritoneum and the whole

mass was removed except a small portion of the capsule which was densely adherent to the diaphragm and which was cut through and left *in situ* in order to complete the removal more rapidly and safely. The wound is now almost healed and the man is making a rapid recovery.

These cases are interesting because of the stones—the last one on account of its enormous size and because the X-ray examinations were in the first case, inconclusive, and in the second absolutely at fault.

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EDITORIAL.

(Special Correspondence.)

A "Chiel" at St. Paul.

"A chiel's amang ye takin' notes
And, faith, he'll prent it."

Because the American Medical Association accepted the invitation of the Saints, sundry other associations planned to meet at the same place and at about the same time. Possibly because, being strangers, they might prove to be *incognito* angels when entertained thus unawares. Be that as it may, a company gradually increasing in size as it wended westward, left the Eastern boundary of Pennsylvania on the afternoon of Decoration Day. The "Black Diamond Express" played the game of "snap the whip" to perfection as it rapidly rolled off the miles over the tortuous track of the Lehigh Valley Railway. The Michigan

Central, through the courtesy of Mr. W. H. Underwood, the G. E. P. A., had made every preparation for our comfort until we were consigned to the care of the Burlington people at Chicago, through the happy efforts of Mr. H. E. Heller, their representative in Philadelphia, and it seemed to be almost a crescendo of care as we journeyed westward. St. Paul was reached on Saturday morning. The very first experience at the station was an earnest of the hospitality to be shown; our entire party was conveyed to our various places of lodgment by private carriages provided by our hosts.

The American Academy of Medicine held a very interesting and successful meeting on Saturday and Monday. The Association of American Medical Colleges had an important meeting on Monday. In this association the legislative action is often more important than the papers presented and discussed. It has been trying to keep the medical colleges up to a proper standard, and the larger and more fully endowed institutions have been engaged in strengthening the required curriculum and in making the minimum conditions of a course leading to the medical degree in colleges, members of the association, all that is to be desired. This did not meet universal favor however, and naturally, for many of the smaller colleges are pinched by these requirements so far in advance of the facilities possessed by them for medical instruction. Through a lack of observance of parliamentary methods at Atlantic City last year, the legality of the action taken at that meeting was, at least, doubtful, and the struggle was on again for this year. The effort was made to materially strengthen the course. In these days of progress in medical pedagogics, it would be suicidal for any college to oppose any just plan having this purpose in view. The opposition usually devotes its attention to making loopholes in the regulations, by which they can assume the virtue not possessed and yet escape punishment withal. But this year, there was a new factor in the problem, and this was made use of to defeat the proposal to strengthen the course. The medical schools in the South, for the most part, have not published as high conditions for graduation as required by the Association of American Medical Colleges, which resulted in the organization of a Southern

Medical College Association. The reason for this was not a desire upon the part of southern medical teachers for a lower grade of physicians; contrariwise, they are as eager for the advanced culture as their northern confrères, but the poverty resulting from the South being the seat of the War for the Union simply made it impossible for them to incur the expense involved in the advances. Notwithstanding they had been making progress and now they were prepared to comply with the standard heretofore set up by the larger association. It was a question of advance with a devil-take-the-hindmost spirit; or of standing still and offering assistance to the weaker colleges, and securing one association in the place of two, which could not help being somewhat antagonistic. This latter course was determined upon by the association.

Last year, under the enthusiastic attacks of a young physician, interstate reciprocity in medical licensure was made prominent in the councils of the National Confederation of State Medical Examining and Licensing Boards. Not but that the question had been discussed before, for it had at almost every meeting; but that it was brought forward as the most prominent question before the confederation. After a full and free discussion at this meeting, it was demonstrated that the time is not ripe for agitating the question and the subject was dismissed and the committee discharged.

But the greatest interest centered around the sessions of the American Medical Association. It was impossible for your chiel to attend and report the many excellent papers of the dozen or more sections, and he will not select the papers of the section of his choice to the exclusion of the others. Suffice it to say that excellent work was done in them all. The general sessions afford material enough for all the space at command.

Possibly the need for a revision in the organization of the association was never more clearly demonstrated; it would be hard to imagine more high-handed methods of seemingly transacting business, than those employed to secure certain ends. This comment is made not because the subject itself is objectionable to the writer, for in the main it was not. As the action taken is so important in its influence upon the association it may not be

amiss to record the matter in some detail. From the beginning the American Medical Association was designed to be a delegate body. Under the old organization the affiliating bodies were privileged to send one delegate for every ten of their members. This sending of delegates involved no responsibility upon the various societies sending delegates. Each delegate paid his own fee, and could continue as a permanent member by paying the annual dues. But permanent members, if not also delegates, had no right to vote. While the members in attendance were comparatively small, this worked very well. As the size of the annual gatherings increased, the body became unwieldy. In the transaction of business, when there was no special opposition, there was no necessity of inquiring as to the status of those who were voting. When subjects of great importance were discussed, about which there was a marked difference of opinion, the passions were appealed to rather than the intellect, and the vote was swayed by sentiment rather than reason, and a very small clique was able to prevent action on any question by demanding a call of the roll which, because so seldom requested, was never prepared.

Various efforts have been made to effect some changes to improve this method, for the most part unavailing. The association may be roughly divided into three divisions: (1) Those who attend for mutual improvement (the regular attendants upon the section meetings); (2) those who attend more for a good time and social relaxation than any other reason; and (3) those who desire to run the machine. These classes merge imperceptibly into each other. It is said that the influence of the latter class prevented any reorganization of the association. A few years ago, however, a very inoffensive resolution was adopted, constituting a Business Committee (afterwards known as the Executive Committee). This committee was made up of three members from each section, the chairmen of the sections each serving three years. To this committee all business was referred before the association could act upon it, and while the recommendations of the committee were not always accepted by the association, it expedited business, steadied the general sessions, and was working great improvements, as was evident from the greatly

increased popularity of the annual meetings. One other item of history; at the meeting for 1900 a Committee on Reorganization was appointed, consisting of a smaller division to formulate the report and a larger division of one person from each state to act as an Advisory Committee. Shortly before the meeting the report of the committee proposing an entirely new constitution was circulated quite extensively.

The air was filled with rumor as we approached St. Paul, and as these notes strive to portray the meeting itself and not merely to give a lifeless outline of the things accomplished, attention must be paid to these rumors. It was said, that the politicians seeing that their rôle would soon be that of Othello, were the operations of the Executive Committee to be allowed to continue, had devised this scheme of reorganization. Attention was also called to the visit of the president to the recalcitrant members of the profession in New York and his efforts to heal the breach, and then it was whispered that the code would be modified in some occult way in order that the president might deliver the goods according to the terms of the contract entered into by him and the New Yorker's aforesaid. On the other hand the proposed revision met the approval of many.

Such was the temper of the meeting and such the expectancy when the association assembled on Tuesday, June 4th. The president's address did not seem to allay the suppressed excitement. He opened with the usual words of thanks, mentioned the death of three of the ex-presidents within a single week during the year, and suggested that steps be taken to procure suitable portraits of these and other deceased presidents. He then spoke of the meetings of other societies who received delegates from our own; spoke of the marvelous increase in circulation and financial resources of the Journal, called attention to the fact that the aggregate circulation is two and a half times greater than the total membership, and wondered why this is so. His next topic was the scientific work of the association, while great advance had been made, still "It would redound largely to the interest of our annual session if the general membership could be entertained and instructed at our general meetings by exercises of a more purely scientific character of such broad nature that

they should not be restricted to any of the sections." Whether this sentiment is to reflect upon the character of the annual addresses at these general meetings your chiel canna say: he thinks not however, it was but the sepia of the cuttle fish. He then turned to the congressional and state legislative action during the year, which led to a study of the profession, the association, and the commonwealth. He spoke of this relation as a process of evolution, as determined "by laws as immutable as those which govern the commingling of atoms or the sidereal strides of the planets." This latter metaphor is somewhat of a blot on an address of excellent diction. Stars do not stride, and planets are not stars. He then sketched the social relations of the physician to the community at the time of the organization of the association, the reason for the adoption of the rules of conduct (with the skill of the orator, he never once makes mention of the code of ethics by the name usually given to it), and shows how that these rules were not accepted by all of the state societies at the time of their adoption by the association. Continuing the historic review he shows how physicians in various states have deliberately violated the express language of the code, which New York assayed to avoid, only to meet the condemnation of the association for doing as Massachusetts, Rhode Island, and Mississippi had always done without being called upon for explanation. This part of the address is a powerful arraignment of the inconsistencies of the vast majority of code defenders; it is a pity that the recommendation in the address that "the general question of the revision of the rules of conduct be referred to a special committee on ethics, consisting of three members, with instructions to report * * * at the next annual session of the association," failed of adoption. The address, in conclusion, urged the adoption of the new constitution at this meeting.

It is evident from this address that rumor had some foundation on which to build its startling reports, and that the staid and conservative were horror-stricken at the iconoclastic suggestion of the president.

After the transaction of some important but not exciting business, one of the vice-presidents presiding, the report of the Com-

mittee on Reorganization was called for, and then the fun began. A motion was immediately made to refer the report to the Nominating Committee, and amendment and protest followed fast until the whole caucus was tied into a knot that would have dulled the edge of Alexander's sword to undo. But, and this was soon made manifest, the method of procedure was carefully cut and thoroughly desiccated; if planning and lungs were to avail, the new constitution was to be declared adopted because of the vote or in spite of it as the case might be, and there was no leader of experience and self control to check the flood of mob rule.

A brief report was read, and a man who had his resolution written out was recognized, although he was not the first to address the chair; his motion finally prevailed, and the report was referred to a committee consisting of the Executive Committee, representing the sections, and the larger Committee on Revision representing the states, with instructions to hold a session during the day and listen to arguments for or against. It was afterward publicly stated that the hearing given by the committee was fair and courteous to all. This statement was not accepted by all and the chiel has a note of one who said that only those who were favorable to the plan really obtained a hearing. This was said by a man whose reputation for honorable dealing and veracity is as high as any member of the association. As the chiel did not attend the meeting personally he is unable to determine which statement is more nearly accurate. Some changes in the printed report were made by this committee. The amended constitution was read on Wednesday, this time the president in the chair. Rumor held a field day again. All sorts of wild things were to be done; it was said that the presidency was offered to a pronounced opponent of the plan, were he only to move its acceptance. The report was read, and chaos seemed to be impending. But out of the many motions, a motion to adopt the constitution and by-laws was made and a *viva voce* vote taken. The chiel abstained from voting that he might the more fairly determine the relative volume of sound, and he agrees with the chair that the yeas made the most noise; he respectfully dissents from the opinion of the chair expressed

the next day, that the constitution was adopted by practically a unanimous vote. The chair declared the motion carried, no one appealed, and then to make a show of legality it was moved to reconsider and to lay the motion to reconsider on the table (but one motion) which was adopted. It is the chiel's honest belief that the constitution could have been adopted by a constitutional majority of the delegates present, and that the objectors would not have been obstructors, and it was pitiable to see a man thought enough of by his fellows to be elevated to the presidency of the largest representative medical society in the United States, turn a deaf ear to all who addressed the chair that were not primed with their little speech or motion. This is not alone the observation of the chiel, but the expressed opinion of many. No matter how much he may have desired the passage of very desirable legislation, he was elected to conserve the law and not to lead a lawless mob. The constitution of the American Medical Association provides (present tense, not past for should any one take the pains to secure a judicial decision on the subject, the new constitution would not be sustained) that only delegates shall vote. No effort was made to ascertain whether those shouting were even connected with the association; it also provides that amendments to the constitution must lay over for one year (but possibly an entire new constitution is not an amendment), and must receive a two-thirds vote of the delegates voting. The volume of noes was sufficient to make it evident to the unprejudiced mind that many more than one-third voted against the motion. No action, however generally concurred in, can legalize an illegal procedure; the new constitution is the result of a revolution, not of an orderly procedure. No public protest was made against it, the growlings were deep but private, many felt very sore. Perhaps it was a justifiable revolution, but revolutions are not pleasant occurrences at their best.

A sequel to this occurred the next day. If the rumored secret treaty between the New York new code men and the president was a reality, he was certainly faithful to his promise both in his address and in his rulings regarding the new constitution; there remained the code. The Executive Committee reported on

the recommendations of the president's address on Thursday. Among these was that appointing a Committee on Revision of the Code. An effort was made to adopt all of the recommendations of the committee on other subjects as well as on the president's address by one motion but this signally failed. There were too many devout worshipers of the *ipsissima verba* of that worthy document, around which the faithful gather to reverence, and then, departing, to infringe on every principle. The recommendations were taken singly, and when this one was reached, one of the most accomplished parliamentarians of the association took charge of the opposition. We have done enough railroading he said. Indeed his speech reminded one of the milk man who grew rich by serving his customers using a scant measure, and out of his profits purchased a grist mill; repenting of his former evil practice, he determined to make amends by having his measures, with which he measured his toll for grinding, made larger than standard. "We have had enough railroading," he said, "and I have helped in it; now let us go decently and in order. If the old code is to be put aside, I can stand it, but let us see if we want to put it aside; I demand the roll-call," whereupon the secretary arose, having in his hand a good-sized blank book. "I wish to know, Mr. President," continued the parliamentarian, "What roll it is, the secretary is to use? Is it of last year's meeting or some other meeting?" to which the secretary replied "In this book, and in this," pointing to another on the table by his side, "are copied the names of all the delegates registered at this meeting, about 1300 in all." It was pitiable to see the change of front of the parliamentarian. The demand for the call of the roll was not made in good faith, for he thought it could not be furnished, and he turned with a weak plea to the house. This roll-call, he said in effect, will take all the time of our session, and while we on our side will demand it if necessary we appeal to you to spare us the necessity and save us the time. How are the mighty fallen! were the code of ethics all that he claimed it to be, why not meet the issue squarely and debate it on its merits? Besides, what right had he to assume that even the most ardent advocates of revision desire to alter the principles embodied in the present code, but only to change its wording to

meet the present day social conditions? The snarl was untangled by a motion to postpone the roll-call until next year, and thus to add another year to the agitation and division in the profession. If rumor told the truth about the president's deal, he was unable to deliver the goods.

Your chiel was compelled to leave St. Paul before the general session on Friday and cannot give an account of that meeting, which, usually, is comparatively small. The newspapers say a resolution was adopted recommending the restoration of the canteen to army posts. Apart from the merits of that question, a passage of a resolution of this kind at the last session is another illustration of the necessity for the change in the constitution so forcibly made at this meeting. A society in which the elder N. S. Davis so long held an almost controlling interest, would never unanimously pass a resolution of that kind were it properly placed before it and calmly discussed. The whole contention in these notes is not as to the merits of the changes but the lawless manner of securing them. The association elected Dr. John Wyeth, of New York, to the presidency and selected Saratoga Springs for the place of the 1902 meeting, when the new constitution will go into effect. 1806 were registered as in attendance.

This letter has been so largely political, that little space remains for the social features. The section banquets were well attended and enjoyed on Tuesday evening. By grouping several of the smaller sections, each one had a banquet. On Wednesday five of the beautiful homes on the magnificent Summit avenue were opened to the association, and a smoker given, possibly for those who were not inclined to the more formal receptions. On Thursday evening the physicians of Minneapolis gave a reception and ball in the Armory of the University of Minnesota, at which time the buildings in the University were thrown open. Besides there was any amount of the generous whole-souled western hospitality shown on every side.

The journey home was begun in the morning, in order to view the beauties of the Upper Mississippi, and indeed it was a fair sight to behold.

A brief stop over was made at Buffalo to take a peep at the

"Pan," and a magnificent sight it is, especially when seen at night, and then another experience with the Elfin curves of the Lehigh Valley and home.

NEWS ITEMS.

The Summer Meeting of the Lehigh Valley Medical Association, will be held on Thursday, July 25th, at Mauch Chunk, Pa.

Announcement cards containing the program will be mailed to members within a few days.

It is announced that the dates of the next meeting of the Mississippi Valley Medical Association have been changed from the 10th, 11th, and 12th of September to the 12th, 13th, and 14th of September. This change has been made necessary because the dates first selected conflicted with another large association meeting at the same place.

The meeting is to be held at the Hotel Victory, Put-in-Bay Island, Lake Erie, O., and the low rate of one cent a mile for the round trip will be in effect for the meeting. Tickets will be on sale as late as September 12th, good returning without extension until September 15th. By depositing tickets with the Joint Agent at Cleveland and paying 50 cents the date can be extended until October 8th. This gives members an opportunity of visiting the Pan-American Exposition, at Buffalo, to which very low rates by rail and water will be in effect from Cleveland.

Full information as to rates can be obtained by addressing the secretary, Dr Henry E. Tuley, No. 111 West Kentucky Street, Louisville, Ky. Members of the profession are cordially invited to attend this meeting.

Those desiring to read papers should notify the secretary at an early date.

"Rudolf Virchow Fund."—On October 13, 1901, *Rudolf Virchow* will be eighty years old. When he completed his seventieth year a fund was started in his honor to enable the great master to facilitate scientific research by establishing scholarships, and by encouraging special medical and biological studies. Contributions to that "*Rudolf Virchow Fund*" were furnished by those in all countries interested in progressive med-

icine, as a homage to the man whose name is always certain to arouse admiration and enthusiasm.

In Berlin, a large committee, containing among others the names of A. Bastian, v. Coler, A. Entenbug, B. Fraenkel, O. Israel, Fr. Koenig, C. Posner, and W. Waldeyer, has been formed to call for contributions which are to be added to the original "*Rudolf Virchow Fund*" so as to increase its efficiency. The committee expresses the opinion that in no better way, and in none more agreeable to the great leader of modern medicine, can his eightieth birthday be celebrated, and ask for the sympathy and cooperation of all those engaged in the study and practice of scientific medicine all over the globe.

The undersigned have formed a subcommittee for the purpose of making the American profession acquainted with the intentions of the Berlin committee, and urge their colleagues to participate in honoring the very man who has done more, these fifty years, than any other to make medicine a science, and international.

Subscriptions should be sent to their secretary, who will receipt therefor.

CHARLES A. L. REED,
President of the American Medical Association.

HENRY P. BOWDITCH,
President of the Congress of American Physicians and Surgeons.

WILLIAM K. WELCH,
Johns Hopkins University.

ROBERT F. WEIR,
President of the New York Academy of Medicine.

A. JACOBI, *Secretary,*
110 West 34th Street, New York.

PAMPHLETS RECEIVED.

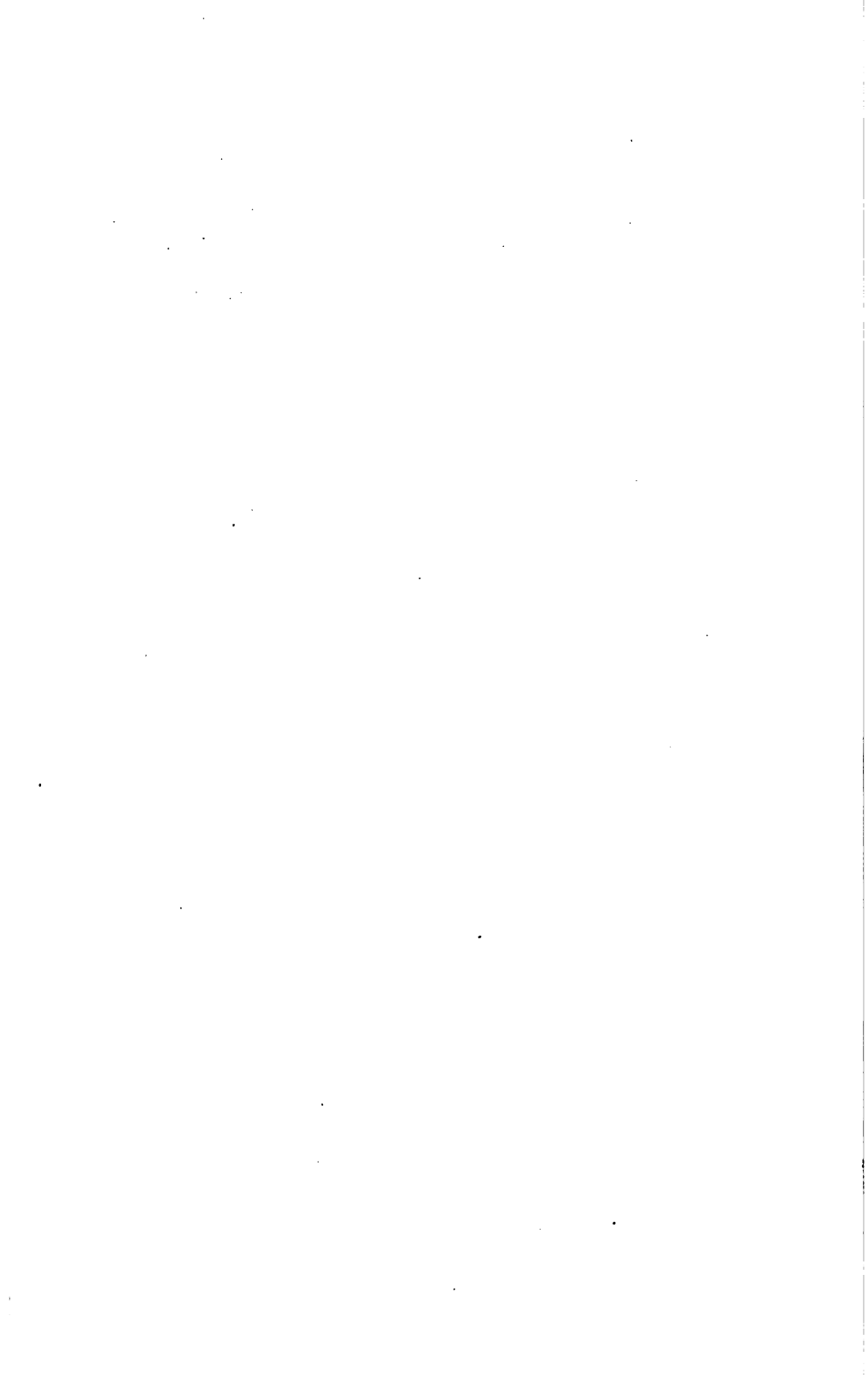
Bangs, L. Bolton, M.D. A Contribution to the Bottini Operation for the Radical Relief of Prostatic Obstruction. *Reprint.*

Cheatham, W., M.D. The Nose and Throat in Scarlet Fever. *Reprint.*

Conklin, A. B., M.D. Mental Perversions Due to Lithemia. *Reprint.*

Davis, Charles Gilbert, M.D. Two Hundred and Thirty-Seven Consecutive Abdominal Sections.

- Eads, B. Brindley, M.D. Appendicitis. *Reprint.*
- Hebbard, E. C., M.D. A Scientific Basis for Medicine. *Reprint.*
- Ott, Isaac, A.M., M.D. *Pussiflora Incarnata*—Its Physiological Action.
- Rosenthal, Edwin, M.D. The Medical Treatment During the Adolescent Period. *Reprint.*
- Walker, Henry O., M.D. Abdominal *vs.* Vaginal Hysterectomy.



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ORIGINAL ARTICLES.

HEMATURIA AS A SYMPTOM.¹

BY HERBERT B. GIBBY, A.M., M.D.,
Attending Physician, Pittston Hospital, Pittston, Pa.

The desirability and importance of an accurate diagnosis, in fact, the necessity of such as a preliminary to intelligent treatment, renders unnecessary any excuse for the subject which I present for your discussion to-day.

The importance of hematuria as a symptom lies in the fact that it may be the expression of either a traumatic or a pathologic condition of some portion of the genito-urinary tract, and it is not an impossibility that the two conditions coexist.

As railroad surgeons, we are especially interested in the value of hematuria as an indication of injury, but in order to properly appreciate the symptoms as such we must be familiar not only with the injuries to the genito-urinary tract and the condition of the urine produced by each, but also with all the pathologic conditions which lead to hematuria, and be able to distinguish the one from the other.

The amount of blood in the urine varies all the way from a few corpuscles that can be detected only by the microscope after centrifuging the urine, to almost pure blood, at times occurring in clots, again being intimately mixed with the urine, imparting to the latter a reddish brown color which varies in intensity with the quantity of blood, the character of the hematuria indicating more or less clearly the location and severity of the injury.

When a few drops of pure blood and a clot or two precede a bloody urine which rapidly clears to the normal, and at the end of micturition the blood again appears, or comes on between the

¹ Read before the annual meeting of the Lehigh Valley Railroad Surgeons' Association, Buffalo, N. Y., June 6, 1901.

acts of micturition, all indications point to an injury in some portion of the urethra, the severity of which may range from a slight contusion to a rupture; when the latter is complete, however, the rule is a little pure blood, with only rarely a drop or two of urine.

The injury to the urethra may occur in any part of its course, but as a result of direct violence, the membranous or prostatic portions are most frequently involved. The penile urethra has been ruptured from too violent coitus or from the attempt to straighten a chordee.

If the injury is sufficient to produce a stoppage of the urethra, the passing of a catheter will aid in determining the extent of the injury, or if the patient is able with some straining to pass his urine, a progressive infiltration of the parts with urine will indicate a rupture.

The passage of a calculus through the urethra will frequently produce hematuria, but the other symptoms such as the stoppage of the urine, the metallic click on passing a catheter, etc., are far more characteristic, and hence but little diagnostic importance is attached to this symptom.

Prostatic calculi, which are also a cause of hematuria and urethral hemorrhage, are more difficult to diagnose, especially if none of the calculi are passed, but a rectal examination gives a peculiar creaking sensation, as does also the catheter as it passes over the prostate.

The characteristic hemorrhage from the urethra may also be caused by a number of pathologic conditions, which may, with more or less ease, be distinguished from the traumatic conditions, the diagnosis between the two sometimes being of medico-legal importance.

Among these causes may be mentioned mucous polypi, which besides the hemorrhage produce a slight urethral discharge, some discomfort and a partial obstruction to micturition. They can frequently be located by a sound or catheter, but if not, the endoscope furnishes a pretty sure means of diagnosis.

Papillomata occur but rarely in the male urethra, but are not uncommon in the female, when the diagnosis presents no difficulty.

Specific urethritis and prostatitis is a not infrequent cause of hematuria, but the history, urethral discharge, and other characteristic symptoms, present a picture not easily to be mistaken.

Primary carcinoma of the urethra is exceedingly rare, and when it does exist can seldom be diagnosed in the primary stages. Pain and gradual increasing difficulty of urination, with hematuria and a formation of a hard tumor around the urethra in men past middle life, and who have had some urethral trouble as stricture, are the most prominent symptoms. Tuberculosis of the prostate may involve the prostatic urethra and produce a urethral hemorrhage. This latter is, however, associated with muco-pus in which the tubercle bacilli can usually be found, rendering the diagnosis certain.

Urethral chancre is also a cause of hematuria, but is diagnosed by the history and other symptoms.

The condition of the urine in affections of the bladder is quite characteristic and differs from the same in urethral affections, unless the trouble is located in the neck of the bladder, when the conditions are somewhat similar.

In vesical injuries the urine contains ragged or irregular shaped clots, the blood being of a bright character and not very intimately mixed with the urine. At the end of micturition there are usually a few drops of pure blood.

The protected situation of the bladder in the pelvic cavity behind the symphysis pubis makes it less liable to injury than the urethra, and when empty it is rarely, if ever, affected by injuries other than those involving the bony structure of the pelvis. The most frequent injury is that caused by a fragment of the fractured ramus of the pubic bone piercing the bladder wall, close to the neck, or a portion of the bladder being squeezed between two fragments of bone. The fracture of the pubic rami sometimes involves the neck of the bladder and the prostatic portion of the urethra, in some cases cutting the sphincter muscle, so that if the urethra is not cut entirely across so as to prevent micturition altogether the patient loses all control over the act. The diagnosis of a ruptured bladder is sometimes easy, sometimes very difficult. In two cases I have been able to pass a catheter into the opening in the bladder wall, but this is not always possible and we have to depend on the symptoms.

The urine contains blood clots and partially mixed blood, which is sometimes passed by the patient, sometimes can only be obtained by catheterization.

In complete rupture, the bloody urine ceases entirely, if the wound opens into the peritoneal cavity (a rather rare occurrence) or can only be obtained in small quantities when the wound opens into the lax tissue around the viscus. In all cases of doubt, I should deem a suprapubic cystotomy a justifiable measure to make certain the diagnosis, as the symptoms of a peritonitis, or of a cellulitis from the infiltration of the urine are slow to show themselves, and the sloughing that is certain to follow any amount of infiltration is most dangerous and appalling.

A hematuria from the bladder which is sufficiently marked to indicate a possible rupture should therefore be given immediate and most careful attention in order that a correct knowledge of the injury may be obtained. Rupture of the bladder may be caused by ulceration, or a result of prolonged pressure or inflammation. It may also rupture from simple overdistension, but fortunately such cases are very rare, as they reflect on the physician who has charge of the case.

Vesical hematuria may also arise from the too rapid evacuation of an overdistended bladder, usually in elderly men suffering from prostatic obstruction and cystitis.

The overdistension stretches and weakens the capillary vessels in the bladder wall, and when the bladder is emptied, the blood rushing into the vessels deprived of their mechanical support, produces thousands of minute rents from which the blood oozes with such rapidity that it sometimes fills the bladder with clots.

Hematuria is one of the three cardinal symptoms of vesical calculus. It is usually observed after motion or exercise, and may be absent for days if the patient remains in bed, to recur again as soon as he walks about. The blood may be pretty thoroughly mixed with the urine, or may occur as a few drops of blood or bloody urine at the end of micturition. It is doubly significant of stone if it occurs only when the act is performed standing and is absent when the patient is reclining. Foreign bodies in the bladder may also produce a bloody urine.

Hematuria is a most prominent symptom of vesical tumors, which may be either malignant or benign, and which occurs with comparative infrequency but at all ages. Henry Morris admirably describes this condition, as follows: "Hematuria is by far the most constant symptom; it is in some cases the only one. Its onset, its course, and its abundance are characteristic of tumor. It comes on spontaneously without injury, fatigue, or even movement, and it causes difficulty in micturition only when clots accumulate in the bladder or one for awhile obstructs the urethra. It may be excited by catheterism or by distension of the bladder; and rest even in the recumbent position has no effect in stopping it. After the hematuria has existed for hours, days, or weeks, the urine may suddenly become quite clear. While the hematuria lasts the urine is not equally charged with blood at each micturition; the quantity may vary from day to day, or even from hour to hour, and the urine passed at one time may be clear, whereas that voided immediately before and immediately after may be highly colored. More blood is passed at the end of micturition than at any other part of the flow."

"The quantity of blood is often exceedingly great; the urine is frequently deep red or quite black; clots—red, black, and discolored—may be passed and may cause great suffering in passing, or they may be retained in the bladder and require cystotomy for their removal. When the attack has passed, the patient may, if the tumor be a benign one, remain for many weeks or months without a recurrence; but if the tumor is malignant, the interval between the attacks will not be very long, and will constantly tend to shorten, until the hematuria is always present, though still showing exacerbations. There is no relation between the size of a bladder tumor and the amount of hemorrhage; the blood lost may be alarming, even fatal, from a small innocent growth." At times the passage of a portion of the growth reveals the diagnosis. The so-called *Blasen hemorhoiden* of the Germans, the dilatation and hypertrophy of the prostatic plexus of veins at the neck of the bladder are sometimes a cause of hematuria. The diagnosis is quite difficult.

Tuberculosis and cystitis are also a cause of hematuria, but the ammoniacal urine thick with muco-pus, and the presence of tubercle bacilli, furnish a ready guide to its etiology.

The urine in hemorrhage from the kidney is usually of a reddish brown color, the blood being intimately mixed with the urine and rarely occurring in clots except of a long rod-like character, representing a cast of the ureter. The urine is usually of a lower specific gravity, of an acid reaction, and frequently in diseased conditions of the kidneys contains renal casts and epithelium. On standing, a more or less brownish coffee-colored sediment is deposited.

Traumatic hemorrhage from the kidney is usually caused by direct violence to the abdomen or back in the region of that organ, the most common form causing no break in the continuity of the abdominal wall and frequently a far less degree of contusion to the latter than to the kidney itself. Penetrating wounds in that region may also involve the kidney, in which case the hematuria being present in all but eight per cent. of contusions and ruptures, but only in about 50 per cent. of penetrating wounds furnishes an important means of diagnosis. Violent muscular action is reported to have produced slight hemorrhage from the kidney, the muscular strain suddenly and violently diminishing the space in which the kidney lies and acting, no doubt, somewhat in the nature of a blow. Severe crushing injuries may break the lower ribs in the region of the kidney and injure the organ directly in that way. In some instances both kidneys are injured. Hematuria has also occurred as the result of the extension of an inflammation due to the injury of the surrounding parts, to an uninjured kidney.

The degree of the injury to the organ itself is often quite difficult to determine from the hematuria apart from the other symptoms, as the amount of blood found in the urine largely depends upon the relation of the injury to the pelvis of the kidney.

Dr. G. R. Trowbridge, of this city (Buffalo), reported a case of ruptured kidney at the last annual meeting of this Association, in which the amount of hematuria gave a direct clue to the severity of the injury. He made a strong plea for early operation in these cases.

Severe injuries may produce a hematuria followed by anuria, as the ureter becomes plugged with a clot. The hematuria usually lasts from three to five days, but secondary hemorrhage may occur in suppurating cases.

In the majority of injuries the accompanying symptoms leave little doubt as to which kidney is involved, but there are cases in which this aspect assumes serious importance; for instance, in contemplated nephrectomy, it is desirable to know whether only one kidney has been injured and whether the other is the seat of a pathologic condition.

In the female it is comparatively easy to examine the orifices of the ureters in a bladder distended with air after Kelly's method, or to catheterize the ureter, but in the male the cystoscopic work is not of the most satisfactory, and the catheterization of the ureters requires a degree of skill not usually found except among genito-urinary specialists.

A slight hematuria occasionally results from a simple shaking of the kidney, as in horseback riding. I should think that a floating kidney would be especially liable to produce this condition, but I have failed to find this symptom reported in the above class of cases.

As in the case of the bladder, so in the kidney, a bloody urine is a most important symptom of calculus; it occurs generally in slight amounts only, or at intervals, being largely dependent upon motion of the patient, and is especially characteristic of the oxalate of calcium stones.

It is sooner or later associated with muco-pus or mucous shreds as is also tuberculosis of the kidney, the early appearance of hematuria in stone being an important diagnostic symptom between the two.

Hematuria is also said to occur from the uric acid diathesis and at times to be vicarious. It may be caused by an embolism or thrombus within the kidney, but is in such cases only of a temporary character.

Carcinoma, hydatid cysts, and cystic and contracted kidney give rise to profuse and repeated attacks of hematuria which, taken in connection with the other symptoms, such as tumor in the loin, cachexia, etc., form an important link in the diagnostic chain.

Hemorrhage from the kidney is a symptom of the acute stages of Bright's disease and also of the chronic interstitial variety; in the latter form it may be quite profuse and stubborn. It also

appears in amyloid diseases. Hemorrhage from the kidney, as a result of the use of the catheter, may result after a fit of retention both in young debilitated men and in old men with an enlarged prostate. It usually occurs after the urine is withdrawn and appears in the urine at the second catheterization, being intimately mixed with it, lasting often for several days and is quite liable to be followed by a cystitis and pyelitis. If bleeding is very free there will be much pain, as the clots which exhibit the characteristic form pass through the ureter.

Tuberculosis of the kidney has hematuria as a late symptom, but the diagnosis is usually made before this stage is reached.

Pyelitis and pyelonephritis both exhibit this symptom, but it occupies a minor place in diagnostic importance. Abscess, acute febrile processes, purpura hemorrhagica, and certain drugs and toxic substances produce a hematuria, which, however, plays a minor rôle as a symptom.

In the tropics there is an endemic form of hematuria, produced by the presence in the kidneys of a minute parasite—the *Bilharzia hematobia*. It occurs unusually in young males but is not limited to any period of life, and the blood may be passed unmixed at the end of micturition or, if more abundant, pretty thoroughly mixed with the urine. Occasionally, however, so little is present that it can only be detected by the microscope.

The diagnosis is determined by the history and the finding of the ova in the clots or sediment.

In conclusion, it must be remembered that blood in the urine, even in small quantities, always produces albumen; that blood may be present in quite appreciable quantities and yet not produce a recognizable discoloration and only be detected by the microscope; that its value as a symptom is largely dependent on other symptoms, and that it is a danger signal whose warning should always be heeded.

AMONG THE SOCIETIES.

LEHIGH VALLEY RAILROAD SURGEONS' ASSOCIATION— TRANSACTIONS.

The annual meeting of the Association of Lehigh Valley Railroad Surgeons was held at the Niagara Hotel, Buffalo, N. Y.,

on Thursday, June 6, 1901, Dr. L. E. Hollister presiding.

The following surgeons responded to roll-call: Drs. Hollister, Tyrell, E. B. Dana, Zern, Reber, Farquhar, Tweedle, Longshore, Flexer, Hermany, Williams, Trimmer, Weaver, Gibby, Christian, Sturdevant, Johnson (T. B.), Ott, Johnson (W. E.), Brown, Dow, Trowbridge, McCarty, Menzie, and Creveling.

On motion of Dr. Ott, the reading of the minutes of last meeting was dispensed with.

On motion, duly seconded, it was unanimously agreed that all the business of the meeting be transacted at this session, and that Friday's session be dispensed with.

The president appointed the following committees:

Nominating Committee—Drs. Trowbridge, Brown, Sturdevant, Johnson (W. E.), and Ott.

Auditing Committee—Drs. Tweedle, Dow, and Williams.

Drs. Tyrell, Lathrop, and Young, surgeons appointed since last meeting, were elected members of the association.

The Executive Committee reported that they held a meeting in the office of the Surgeon-in-Chief, Dr. Estes, South Bethlehem, in January, when, upon motion of Dr. Trowbridge, June 6th and 7th, was agreed upon as the time, and the Niagara Hotel, Buffalo, N. Y., as the place, for holding the annual meeting. Drs. Gibby, Dow, and Biddle were selected to prepare and read papers at that meeting.

A recess of ten minutes was declared, to give the committees an opportunity to prepare their reports, and the secretary to collect the annual dues.

The meeting being called to order again, the Nominating Committee presented the following report:

For *President*—O. E. McCarty, Niagara Falls.

For *Vice-president*—P. Hermany, Mahanoy City.

For *Second Vice-president*—D. W. Sturdevant, Laceyville, Pa.

For *Third Vice-president*—Dr. Tweedle, Weatherly, Pa.

For *Secretary*—J. G. Zern, Lehigh, Pa.

For *Executive Committee*—Surgeon-in-Chief, W. L. Estes, chairman, South Bethlehem; General Superintendent, Col. R. H. Wilbur, 26 Cortland street, New York; Dr. J. G. Zern, Secretary; Dr. Dow, Rochester, N. Y.; Dr. T. B. Johnson,

Towanda; Dr. Biddle, Fountain Springs (Ashland); Dr. Brown, Ithaca, N. Y.

Delegates to International Association—Drs. Hollister and Creveling.

As there was no opposition, on motion, the secretary was directed to cast the ballot and all were declared elected.

The Auditing Committee reported as follows:

1900.	DR.	
October 10, To balance in hands of Treasurer.....	\$10.35	
October 10, To dues collected.....	14.00	
		\$24.35
1901.	CR.	
May 31. By bill of LEHIGH VALLEY MEDICAL MAG-		
AZINE	20.00	
Balance.....	\$4.35	

Also :

L. V. R. R. Co. to J. G. ZERN, DR.

For 136 stamped envelopes.....	\$2.96
For 19 postal cards.....	.19
For telephone message.....	.25
For typewritten notices.....	2.50
	\$5.90

June 6, 1901, audited and found correct.

J. B. TWEEDELE,	} Committee.
F. F. Dow,	
W. T. WILLIAMS,	

Vice-president McCarty being called to the chair, the president read his address, whereupon a vote of thanks was given him, and the same referred to the Executive Committee for publication.

Dr. Gibby read a very able and exhaustively prepared paper on "Hematuria as a Symptom." The same was discussed by Drs. Creveling, Trimmer, and Weaver.

The next paper by Dr. F. F. Dow, "The Ethics of Diagnosis," was a masterly production, and was discussed by Dr. Trimmer. A vote of thanks was tendered Drs. Gibby and Dow for their valuable papers, and they were requested to fur-

nish copies of the same to the Executive Committee for publication.

Dr. Biddle, who was to have read the third paper, not being present, it was moved that he be requested to furnish his paper to the Executive Committee for publication.

Dr. Trowbridge presented a man with a severely crushed forearm and wrist.

Geneva, N. Y., was selected as the place for holding the next annual meeting, time to be fixed by the Executive Committee.

A vote of thanks was tendered Dr. Hollister for the able manner in which he presided over the meeting.

The president-elect, Dr. McCarty, was escorted to the chair by Drs. Ott and Farquhar. Dr. McCarty, in a modest manner, thanked the association for the honor conferred upon him.

The meeting, on motion, adjourned.

J. G. ZERN, *Secretary*.

P. S.—Drs. Lathrop, Horn, Biddle, and Ewing arrived too late to take part in the meeting, in consequence of its final adjournment the first day.

Lehigh Valley Medical Magazine

THE OFFICIAL ORGAN OF THE
LEHIGH VALLEY MEDICAL ASSOCIATION.

W. P. WALKER, M.D., Editor.

W. H. DUDLEY, M.D., Business Manager.

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CHARLES MCINTIRE, M.D., Treasurer.

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Office of Publication, 104 North Fourth Street, Easton, Pa.

EDITORIAL.

Summer Annual Meeting L. V. Medical Association.—The attention of members is again directed to the twenty-first annual meeting, to be held at the Mansion House, Mauch Chunk, July 25, 1901. An interesting program has been arranged. Dr. Roswell Park, of Buffalo, N. Y., will deliver the annual address. Members desiring invitations sent to friends should notify Dr. Chas. McIntire, Secretary, Easton, Pa.

NEWS ITEMS.

The Northampton County Medical Society held its "outing meeting" at the Park Hotel, Hellertown, on July 18th.

For Sale: One of the leading physicians in a New Jersey city of 80,000, and rapidly growing because of ship yards and steel

plant now being built which will employ thousands, having a practice of \$7,000 per year, is obliged to seek change of climate on account of a disease that is incurable in this climate. Would like to sell 14-roomed house built for a physician—handsome large reception room, two large offices, open grates, etc.—practice to go with home, or would rent to right party, house \$7,500. Would carry \$4,000 or \$5,000 mortgage. Splendid opportunity for immediate practice in this city for a good man. Address "Practice," care of LEHIGH VALLEY MEDICAL MAGAZINE, Easton, Pa.

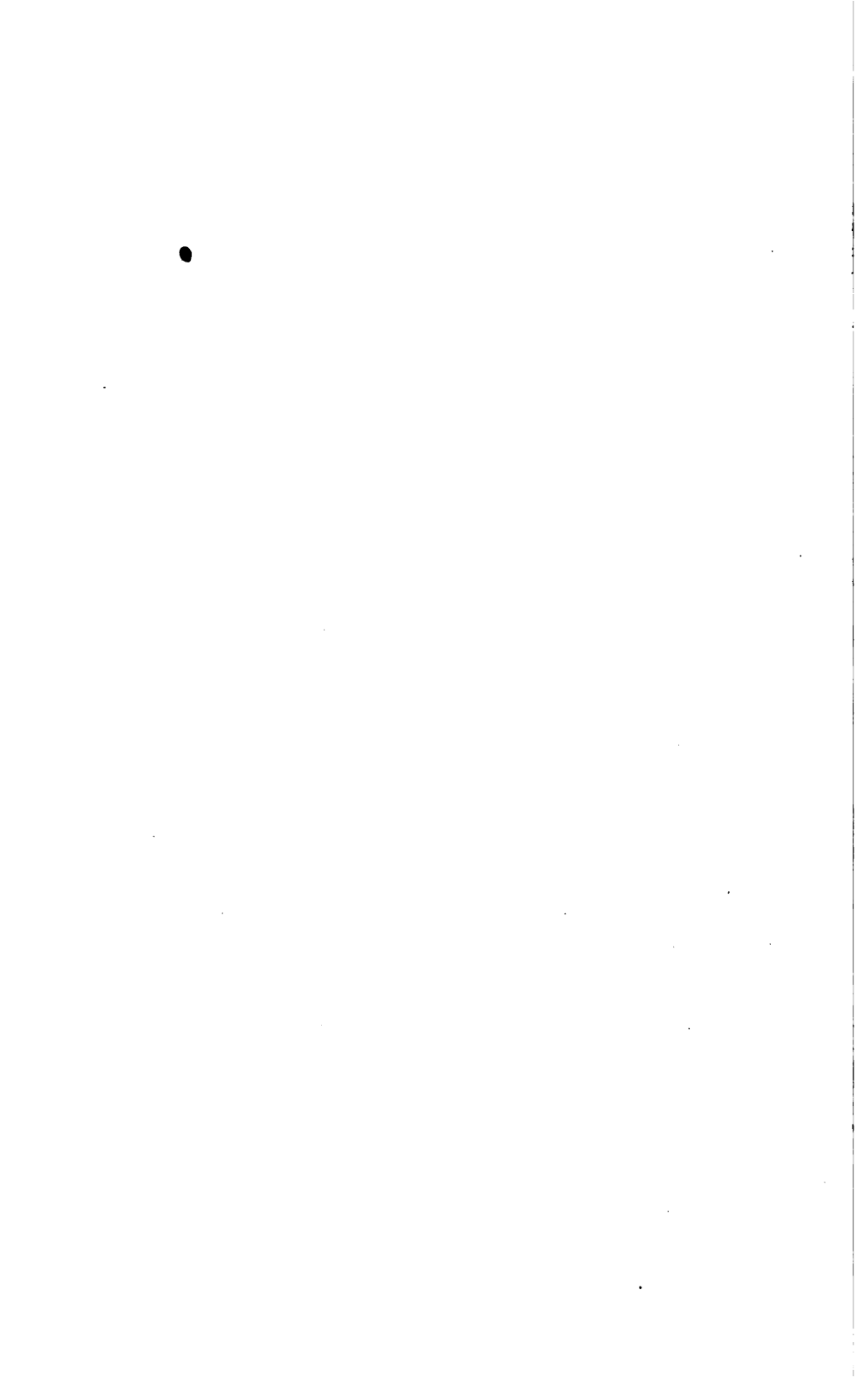
REVIEWS.

ANNUAL AND ANALYTICAL CYCLOPAEDIA OF PRACTICAL MEDICINE. BY CHARLES E. de M. SAJOUS, M.D., and one hundred associate editors, assisted by corresponding editors, collaborators and correspondents. Illustrated with chromo-lithographs, engravings, and Maps. Vol. VI, Rectum to Zink, and general index. 1043 pp.

This volume completes the first series of the work and maintains the high standard of the previous volumes. The only objection to the work as one of rapid reference is the incorporation of many minor topics under a generic title, thus introducing subjects out of a true alphabetic order. In itself considered, the plan has great advantages in giving more information in the same space, and all through the work the editor has fully used cross references. The index in the present volume removes any objection as it is very full and seems to be very carefully prepared.

In the individual articles, this number illustrates the high character of the book. The article on "Rheumatism" is by Dr. Lenson, of Copenhagen; "Diseases of the Stomach," by Dr. D. D. Stewart, of Philadelphia; "Surgery of the Stomach and Intestines," by Drs. W. W. Keen and M. B. Tinker, of Philadelphia; and a number of others of equally high standing; to enumerate them all would compel the publishing of a table of contents.

We have only to reiterate the words of the notice of previous volumes as to the real value of this series for ready reference and as to the handsome manner in which the publisher has fulfilled his part.



LEHIGH VALLEY MEDICAL MAGAZINE.

Vol. XII.

AUGUST, 1901.

No. 8.

ORIGINAL ARTICLES.

THE IMPORTANCE OF TRUE DIAGNOSIS.¹

By A. A. SEEM, M.D., Bangor, Pa.

Members of the Lehigh Valley Medical Society: In selecting a subject upon which to address you, I have taken "Diagnosis" for the reason that so much has been written about therapeutics and new remedies that I felt it would not be amiss to have a talk about diagnosis. To be a good diagnostician is to be a good physician, or, in other words, he who would diagnose well, treats well. It has been my fortune, or misfortune, to see or witness the sad results of faulty diagnosis, or no diagnosis at all. Walk the streets and you will see many a cripple, or a deformity, simply the result of a careless or mistaken diagnosis.

Many mounds in the cemetery are made, that a true diagnosis would have avoided. Then again an early diagnosis should be made when there is but the smouldering ember, before it breaks forth into a full flame. Who has not seen a tubercular joint mistaken for rheumatism, until it was too late to remedy or arrest it? It is the physician confident in the possession of the knowledge capable of recognizing, and discriminating between diseased processes in actual practice, who is able to detect the earliest manifestations of the insidious onset of certain chronic diseases, and by appropriate treatment to ward off the acute and alarming symptoms in their very incipiency.

What gave Professor DaCosta, his great reputation, as physician and teacher? Was it not his skill as a diagnostician? While we may not be able to recognize disease as quickly and accurately as he did, we can at least make greater efforts, and not be given to indolence, and carelessness, which I think is often the cause of our mistakes instead of ignorance.

¹ Retiring president's address. Read before the annual meeting of the Lehigh Valley Medical Association, at Mauch Chunk, Pa., July 25, 1901.

It is hardly necessary that I should say that a thorough knowledge of anatomy and pathology is essential to form a correct diagnosis ; that is self-evident, from the egregious blunders made before the dawn of modern pathology, and even now by those who are unacquainted with the subject. In days gone by there was much wise talk of impurities of the blood, of humors, and of temperaments. What we now know to be merely symptoms of diverse diseases, were in those days mistaken for the disease itself ; thus a patient was said to suffer from a rheum, a palsy, a dropsy, or a fever.

Ascites was held to be the cause of cirrhosis of the liver. The same erroneous views are evident in the designations applied to certain diseases, and which persist at the present time ; thus apoplexy means a stroke or striking down, and pleurisy a stitch in the side. Even when an examination of the body was made after death, the patient was reported to have died from a decline. When such were the ideas of medicine, it is not surprising that certain systems of medicine arose and flourished for a time ; that founded on the doctrine of signatures, in conformity with which the Paracelsian physician prescribed an infusion of yellow flowers and saffron for jaundice, an infusion of roses and blood stone for hemorrhage, the spotted leaves of pulmonaria for tuberculous lungs, and that practised by the astrologers, who in accordance with the horoscope of the patients, prescribed various metals and plants, and finally that which still persists, homeopathy, of which the theoretical absurdity is somewhat concealed by the more obvious nonsense of infinitesimal doses.

With the dawn of modern pathology, however, when diseased processes began to be studied and investigated by such men as Rokitsansky, in Germany, Cruvidhill, in France, and others, later by Colnheim and Pasteur, the still living and distinguished Koch, the much-revered Virchow, and a host of others, the systems of medicine were buried in oblivion, and exact diagnosis and therapy became a possibility. In endeavoring to become a thorough diagnostician, and to be able to detect disease in whatever form it may present itself, we must do so by the aid of our clinical experience, and in a scientific manner.

The diagnosis of disease is, and always will remain, an art ; but it is becoming more and more scientific. It may be said

that, strictly speaking, diagnosis is altogether a product of the nineteenth century; prior to that time, it was merely a matter of guess-work and was never definite. At the commencement of the nineteenth century, however, Louis inaugurated his methods of careful clinical investigation, and these, amplified and extended, have remained the guide of clinicians ever since. To Avenbrugger, Leannec and Corvisart, we owe the perfection of methods of physical explorations, the common property of all physicians at the present time. It was, however, during the last quarter of the past century, that the diagnosis of disease progressed by leaps and bounds. This was due entirely to the cultivation of the scientific spirit, and the consequent employment of laboratory methods. Prior to this time, the careful clinical observation that had long been in vogue, the patient scrutiny devoted to the manifestations of disease, had led to the establishment of a nosology, to which it is doubtful if any noteworthy additions would have been made but for the explorations of laboratory methods.

In approaching a patient our aim should always be to make our diagnosis definite and exact. That this desideratum be attained, our investigations must be thorough; we must carefully and minutely inquire into the influences of nativity, heredity, environment, habits of the patient, etc.; we must secure an accurate account of the mode of onset, and the manner of the evolution of the diseases, and our examinations must be thorough and complete, and frequently repeated. In this connection, I wish to particularly urge the importance of the cultivation of your powers of observation. It is well-known that many of the physicians of by-gone days owed their preeminence in the profession, in large measure, to the acuteness of their powers of observation, and to the care and attention that they paid to little things,—things that are likely to escape the observation of others less attentive. The same may be said of us at the present time—the more careful and painstaking we are the more likely we are to attain success. On the extreme value of physical explorations, I shall not speak.

The necessity for careful bedside observation has been recognized from time immemorial; it must always remain our mainstay. At the bedside we must prove or disprove our theories,

and there the results of laboratory investigation must stand the test of practical utility.

I wish to ask your serious attention to the importance and utility of what have come to be known as laboratory methods of diagnosis; the one is not to supplant the other, but both are to be employed in conjunction. In that the laboratory to-day is indispensable, permit me to refer to certain aspects of laboratory diagnosis. No one to-day, alive to the duties and responsibilities of his trust as a physician, is unprovided with a microscope and a few chemical reagents, and neglects to examine carefully the urine. Surely a patient has the right to expect that his nausea, his headache, his dimness of vision, his dyspnea, if due to a renal lesion, shall be recognized as such, and that if his attack of typhoid fever be complicated by nephritis that the latter shall be ascertained and properly treated.

The examination of the blood is of extreme importance in the recognition of very many diseases,—not alone of the blood and blood-forming organs but also of the most diverse disorders of the various organs and tissues. How many young women to-day are being dosed with bitter tonics for a supposed gastric catarrh, or with aperients for constipation, or with various coal-tar products for headache, when, in reality, they are suffering only with chlorosis, which an examination of the blood would disclose, and the administration of iron would promptly cure.

Bacteriology has given us the Guber-Widal test, in the diagnosis of typhoid fever. It is of extreme importance in the recognition of typhoid fever, and is of special value in doubtful cases. Shall I mention the importance of an examination of the sputum in suspected cases of pulmonary tuberculosis, especially to the importance of an early and exact diagnosis, important alike to the patient, the family, and the community wherein he dwells, of the importance of the bacteriologic examinations of the secretions of the throat, more especially in suspected cases of diphtheria? This is too well known and recognized to require reiteration on my part.

Such laboratory methods of diagnosis should be made use of in all cases in which they are likely to prove of the slightest utility. The necessity of the times, however, is the more universal adoption by the general practitioner of these various aids

in clinical diagnosis. This is indicated alike in the interest of the physician, the patient, and the general community. It is to the interest of the physician that he may establish the correct diagnosis at the earliest possible moment, institute the appropriate therapy, and enjoy the mental satisfaction pertaining to work well done; to the patient that he may have the benefit of the early diagnosis, and appropriate treatment; to the community that in the case of certain infectious diseases, the sick man may not prove a source of general infection. I am aware that these procedures add to the already heavy burden of the general practitioner, but they may be mastered by any one having the inclination, in the city as well as the country. A corner of the office may be made to do duty for a laboratory. If the practitioner be too busy to attend to the work himself, he ought to be able to find some one capable of doing it for him. Surely the patient in the country, as well as in the city, has a right to expect an intelligent interpretation of his symptoms and in some cases this is not possible, without the aid of laboratory methods. In many parts of the state, such examinations are made in a laboratory of the city or county boards of health. What should be done is that the physician, either in city or country, in case he feels neither competent nor inclined to make these examinations himself, should at least know when they should be made, and should see to it that they are made by some one who is competent.

AMONG THE SOCIETIES.

LEHIGH VALLEY MEDICAL ASSOCIATION.

TWENTY-FIRST ANNUAL MEETING—TRANSACTIONS.

The twenty-first annual meeting of the Association was held at the Mansion House, Mauch Chunk, Pa., on Thursday, July 25, 1901.

President A. A. Seem was in the chair and called the meeting to order at 10 A.M. The secretary announced that a quorum had registered, and a motion that the reading of the roll be dispensed with then prevailed.

The program as follows was presented and, on motion, accepted:

PROGRAM.

- 9.30.—Meeting of the Executive Board.
- 10.00.—Meeting of the Association.
 - 1. Roll Call.
 - 2. Program Reported.
 - 3. Minutes of the Last Meeting.
 - 4. Report of Treasurer.
 - 5. Report of Executive Board.
 - 6. Election of Members.
 - 7. New Business.
- 11.00.—8. Address of Retiring President.—“The Importance of True Diagnosis,” by DR. A. A. SEEM, of Bangor, Pa.
- 9. Report of Nominating Committee.
- 10. Unfinished Business.
- 12.00.—11. Annual Address before the Association.—“The Evolution of the Surgeon from the Barber,” by DR. ROSWELL PARK, Buffalo, N. Y.
- 12. Unfinished Business.
- 13. Induction of President-elect.
- 14. New Business.
- 15. Adjournment.
- Meeting of New Executive Board.
- 1.00.—Dinner.

It was then moved and seconded that the reading of the minutes of the last meeting be dispensed with, and that the minutes as already printed in the MAGAZINE be approved—carried.

The Treasurer's report properly audited was presented, and on motion received. It showed a small balance on hand, and called attention to the fact that the number of unpaid dues considerably exceeded those of last year.

The annual report of the Executive Board, of which the following is a synopsis, was presented.

“The thirteenth winter meeting of the Association was held at Easton, January 31, 1901, with forty in attendance.

“The report of the Publishing Committee of the MAGAZINE to the Executive Board of the Association shows that the receipts of the MAGAZINE from advertisements, subscriptions, etc. (and exclusive of any dues), during the last six months have more than paid for its printing.

“The various county societies, within the limits of the Associa-

tion, have been invited to participate in the publication of the journal, the matter printed to be paid for *pro rata* after deducting all receipts. None of the societies, however, have indicated any intention to accept this proposition, so that the Publication Committee recommends that the MAGAZINE be discontinued after the completion of the present volume, No. XII. This because the Association itself does not provide material enough of local interest to warrant the issuance of a monthly journal.

"The Executive Board advises the Association that the recommendation of the Publishing Committee be accepted.

"The deaths of Dr. W. G. M. Seiple, of Lehigh, and Dr. Wm. Stiles, of Washington, are noted with regret.

"The following names have been dropped from the roll on account of non-payment of dues for two years, this being in accordance with constitutional requirement:

J. L. Benner,	E. M. Fly,	T. J. Kessler,	Geo. Moyer,
L. S. Brumbaugh,	C. M. Hay,	S. Laubach,	Florence Hull Watson,
W. H. Carr,	O. C. Hepfner,	Peter McGill,	P. O. Wickert.

(Signed) EXECUTIVE BOARD."

On motion the report of the Executive Board was received and its recommendations made effective.

The following names of applicants for membership were reported approved by the Board: Drs. Stackhouse, Hill, Schleman, Longacre, and Clewell. Drs. Seip and Edwards were appointed tellers, and reported all the applicants elected.

The following forwarded resignations of membership, which on motion were accepted: Drs. Fretz, Norton, Roberts, Langton, Mary Greenwald, and Erdman.

Dr. G. T. Fox offered an amendment to the constitution as follows: That Article VIII, Section 2, read: "An annual contribution from active and corresponding members of one dollar shall be due and payable at each annual meeting." In accordance with Article X action on this motion was delayed till next meeting.

The secretary read a communication from Dr. Benj. Lee to the Association, and the president, Dr. A. A. Seem, then gave the retiring president's address, entitled "The Importance of True Diagnosis."

The Nominating Committee presented its report as follows :

President—Dr. Chas. P. Knapp, Luzerne.

First Vice-President—Dr. J. A. Horn, Carbon.

Second Vice-President—Dr. Howard Reeser, Berks.

Third Vice-President—Dr. W. H. Hartzell, Lehigh.

Fourth Vice-President—Dr. E. M. Green, Northampton.

Secretary—Dr. Chas. McIntire, Northampton.

Assistant Secretary—Dr. W. P. Walker, Northampton.

Treasurer—Dr. Abraham Stout, Northampton.

Executive Board—The officers and Dr. Murray Weidman, Berks; Dr. G. M. Grim, Bucks; Dr. B. S. Erwin, Carbon; Dr. G. L. Romine, Hunterdon; Dr. J. C. Bucher, Lebanon; Dr. H. H. Riegel, Lehigh; Dr. L. H. Taylor, Luzerne; Dr. T. C. Walton, Monroe; Dr. J. G. Mensch, Montgomery; Dr. A. A. Seem, Northampton; Dr. Robt. B. McCay, Northumberland; Dr. J. C. Biddle, Schuylkill; Dr. C. B. Smith, Warren.

On motion the secretary was appointed to cast a ballot for the new officers and they were declared elected.

Papers for the next winter meeting :

"Surgery," Dr. Murray Weidman, of Berks.

"Practice," Dr. B. S. Erwin, of Carbon.

"Obstetrics," Dr. W. C. Albertson, of Warren.

Selected topic, Dr. W. L. Estes, of Northampton.

Dr. Roswell Park, of Buffalo, N. Y., then delivered the annual address before the Association.

The subject was "The Evolution of the Surgeon from the Barber." Dr. Park had collected a great number of interesting historical facts regarding the matter, and the members of the Association greatly enjoyed hearing what must have required no small amount of labor and time to compile.

The thanks of the Association were extended to Dr. Parke.

The name of A. B. Katison was presented for election and the secretary was instructed to cast a ballot in his favor.

The incoming president, Dr. C. P. Knapp, of Wyoming, was then escorted to the chair and in a few words thanked the society for the honor of election.

The Association adjourned, after which dinner was served at the Mansion House.

EXECUTIVE BOARD.

The Executive Board for 1900-1901 met at 8 P.M., July 24, 1901, at the Mansion House, Mauch Chunk, Pa. There were present: Drs. Seem, Estes, Wenck, Knapp, Grim, McIntire, and Walker.

Dr. A. A. Seem occupied the chair. The minutes of the meeting of the Executive Board, January, 1901, were read and approved.

The Treasurer's report was read and various bills presented and approved.

The report of the Publishing Committee of the *MAGAZINE*, recommending its discontinuance after the completion of the present volume, No. XII, on account of the failure of the county societies to cooperate, was presented.

Various applications for membership were examined, certain of which were recommended to the Association for election.

The resignations of several members were read and approved and adjournment taken until 9.30 A. M., July 25th.

Morning Sessions, July 25, 1901.—The draft of the Board's annual report was read and ordered presented to the Association. Several additional applications and resignations were approved. Drs. Cleaver and Knapp were appointed a committee to act on membership applications presented during the morning session. The new Executive Board for 1901-1902 met after the adjournment of the Association. Present—Drs. Smith, Seem, Hartzell, Riegel, Grim, McKay, Knapp, Weidman, Taylor, and Walker. Wilkes-Barre was selected as the place for the winter meeting, the date to be the last Thursday in January. The chair appointed Drs. McIntire, Weidman, and Hartzell as a Committee on Program, with power to arrange the program for the winter meeting.

Drs. Howell, Taylor, and Stackhouse were appointed a Committee on Arrangements.

The Board then adjourned to meet at 8 P.M. on the day preceding the winter meeting of the Association.

W. P. WALKER,
Assistant Secretary.

CHARLES MCINTIRE,
Secretary.

Those in attendance were :

MEMBERS.

Behler, J. H., Nesquehoning, Pa.	Martin, C. S., Allentown, Pa.
Catterson, A. D., Aquashicola, Pa.	McCay, Robert B., Sunbury, Pa.
Cleaver, Israel, Reading, Pa.	McIntire, Charles, Easton, Pa.
Clewell, W. H., Summit Hill, Pa.	Moyer, L. W., Mauch Chunk, Pa.
Davis, D. R., Lansford, Pa.	Ott, C. H., Sayre, Pa.
Dickenshied, E. H., Allentown, Pa.	Reichard, P. L., Allentown, Pa.
Dudley, W. H., Easton, Pa.	Riegel, H. H., Catasauqua, Pa.
Edwards, H. T., So. Bethlehem, Pa.	Saeger, L. J., Allentown, Pa.
Erwin, B. S., Mauch Chunk, Pa.	Seem, A. A., Bangor, Pa.
Estes, W. L., So. Bethlehem, Pa.	Sieberling, F. C., Allentown, Pa.
Fox, G. T., Bath, Pa.	Seip, W. H., Bath, Pa.
Gearhart, E. A., Allentown, Pa.	Smith, C. B., Washington, N. J.
Grim, G. M., Ottsville, Pa.	Stackhouse, C. P., Wilkes-Barre, Pa.
Hartzell, W. H., Allentown, Pa.	Stevens, C. L., Athens, Pa.
Hearn, W. J., Philadelphia, Pa.	Stout, A., Bethlehem, Pa.
Horn, J. A., Mauch Chunk, Pa.	Taylor, L. H., Wilkes-Barre, Pa.
Howell, J. T., Wilkes-Barre, Pa.	Tunison, G. O., Oxford, N. J.
Johnson, F. C., Wilkes-Barre, Pa.	Tweedle, J. R., Weatherly, Pa.
Johnson, H. W., Riegelsville, Pa.	Walker, W. P., So. Bethlehem, Pa.
Kistler, C. J., Lehigh, Pa.	Williams, C. M., Washington, N. J.
Kistler, E. H., Lansford, Pa.	Wilson, J. H., Bethlehem, Pa.
Knapp, C. P., Wyoming, Pa.	Young, R. W., Slatington, Pa.
Kotz, A. L., Easton, Pa.	Zern, J. G., Lehigh, Pa.
Kutz, G. L., Weissport, Pa.	

VISITORS.

Atkinson, W. B., Philadelphia, Pa.	Park, Roswell, Buffalo, N. Y.
Buchanan, Rev. D. W., Mauch Chunk, Pa.	Pfaff, J. C., Slatington, Pa.
Everitt, Ella B., Philadelphia, Pa.	Reed, Boardman, Philadelphia, Pa.
Hall, Annie B., Philadelphia, Pa.	Rice, N. S., Durham, Pa.
James, T. A., Ashley, Pa.	Richards, D. W., Easton, Pa.
Lathrop, Ruth W., Philadelphia, Pa.	Sittler, A. M., Bowmanstown, Pa.
Newman, W. M., Reading, Pa.	Williams, W. T., Mt. Carmel, Pa.

Lehigh Valley Medical Magazine

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Office of Publication, 104 North Fourth Street, Easton, Pa.

EDITORIAL.

Diarrheal Diseases in Children.—During this season of the year the attention of the general practitioner is again called forcibly to the prevalence of intestinal troubles in children and their frightful mortality in infants. Holt, of New York, shows that four-fifths of a series of 3000 cases occurred in children under two years of age. He also shows that in New York City the mortality curve from diarrheal diseases corresponds almost exactly with the mean temperature curve, the highest point being reached about the middle of July. Of a series of 1943 fatal cases he states that only three per cent. had the breast exclusively, thus showing that the manner of feeding is one of the most important factors in the production of diarrhea. As regards treatment the following are considered the important points. Begin treatment early—many a case will readily yield if energetically taken in hand during the first day or two. Stop, at once,

milk and all combinations containing it. Use boiled water, barley water or albumen water to allay thirst. If the vomiting and purging have not already pretty well cleared out the digestive tract give castor oil or small doses of calomel and use saline rectal injections. Do not use opium at this stage. One of the mild astringents, such as bismuth subnitrate, bismuth subgallate, or prepared chalk combined with resorcin or salol, may then be given. After the first day or two use expressed beef juice, liquid peptonoids or one of the malted foods cautiously, and do not return to milk until several days after all acute symptoms have subsided, and then dilute it largely at first. Remember the value of the open air for such children, and be very careful to observe strict cleanliness regarding the skin, clothing, napkins, etc.

Back Numbers of the Magazine.—When the MAGAZINE suspends publication, there will be no longer any necessity for preserving duplicate back numbers, and no one will care to store them. With the suspension of publication, also, the privilege of the second-class rates will cease. While complete files cannot be furnished, the Publication Committee will send as complete a file as possible to any member of the Lehigh Valley Medical Association who will send 25 cents to the Secretary of the Association, to pay the wrapping and postal charges. These orders must be received before the December number is issued. Stamps will be received in payment.

LEHIGH VALLEY MEDICAL MAGAZINE.

Vol. XII.

SEPTEMBER, 1901.

No. 9.

ORIGINAL ARTICLES.

LACERATION OF THE PELVIC FLOOR, WITH REPORT OF TWO CASES.

By E. H. DICKENSHIED, M.D., of Allentown, Pa.

Laceration of the pelvic floor, or as it is more often called, rupture of the perineum, is at times one of the most difficult and unsatisfactory conditions which falls to the lot of the general practitioner to treat. As these lesions are most often caused during parturition and should, as a rule, be repaired with as little delay as possible, the conditions and surroundings are very often such that a good result is next to impossible. As any laceration of the pelvic floor which destroys the supporting power of its muscles and fascia, is almost invariably followed by a prolapsus of the pelvic organs. We can very readily see why it is important that the parts should be brought together in such a manner that not only the skin and superficial fascia unites and makes a good appearance to the eye, but that we obtain a firm union of the muscles, so that the pelvic floor may again perform its function of holding up the pelvic organs and control the orifices of the vagina and rectum.

After removing the sutures from a perineum which has been lacerated it is always well to place the index finger in the vagina and grasp the parts anterior to the sphincter ani muscle, between the thumb and index finger. We can then feel whether there has been muscular union or not.

The degree or extent of the lacerations may be divided into four classes:

First. A tear through the fourchit and to a slight extent into the perineum.

Second. When it extends to the sphincter.

Third. When the tear extends through the sphincter.

Fourth. When it extends up the recto-vaginal septum.

We may also have a tear of the muscular tissues which leaves the skin and mucous membrane intact.

The operation to restore the parts may be primary, intermediate, or secondary. The primary operation is the only one we will have time to consider here. This operation should always be performed unless the patient is suffering from shock or the wound has become infected. Special care is necessary to have the parts unite by first intention, for if the wound suppurates we are very apt to have non-union of the muscles. Great care should be taken in cleansing the wound and putting it in an aseptic condition. The uterus should first be emptied and the vagina irrigated with some mild antiseptic solution. The patient should be placed on her back, an assistant holding the legs and flexing them on the abdomen, and a pad of gauze or absorbent cotton placed in the vagina, so as to prevent the discharges from running into the wound. The wound itself should then be cleansed and all hemorrhage stopped, either with hot water or fine catgut ligatures; torsion should not be used as it is very apt to give rise to a slough. The sutures may be of braided silk, silkworm gut, chromicized catgut or silver wire, each of them having their advantages and advocates. Silkworm gut, in my opinion, is the better, as it is stiffer than silk or catgut, and not as liable to become infected, nor will it irritate the patient as much as silver wire.

Lacerations of the first degree can very often be treated by simply cleansing the wound and binding the legs together, or if the wound is of such an extent as to demand a suture, a continuous one will answer very well.

Lacerations of the second degree will require more attention. The sutures should be introduced so as to bring the muscular tissues in accurate opposition. In order to do this, the index finger should be introduced into the rectum, to act as a guide in introducing the sutures and at the same time prevent injury to the rectum. The first suture should be placed at the lower part

of the wound close to its edge, curved inward so as to include all of the muscular tissues and brought out at the corresponding point on the opposite side. A sufficient number should be inserted to close the wound. If the sutures are started too far from the edge of the wound and brought straight down they will not only make the skin overlap, but will cause the wound to separate in the middle so that the muscles will not unite. The consequence will be an entire failure of the desired result.

For lacerations of the third and fourth degrees the rectal wound must first be repaired. This can be done either by a continuous suture, by interrupted sutures tied in the rectum, or we may use buried sutures of catgut, after which the wound may be closed in the same manner as has been described for lacerations of the second degree. Should the wound extend into the vagina any distance, the sutures must be continued up as far as necessary. After the wound is closed, a small strand of gauze should be placed into the vagina and a pad of gauze placed against the perineum. The legs should then be bound together with a bandage. This drain and pad should be removed twice a day and, if necessary, oftener. At the same time the vagina should be washed out with an antiseptic solution.

If the tear extends into the rectum the patient should be placed on a liquid diet and the bowels kept from moving for at least ten days, so as to prevent the wound from being torn open for the second time.

The first case I wish to call your attention to was one in which I was called in consultation,—the injuries were received during parturition. Just how they were caused I am unable to explain to my own satisfaction. All that I know is that they were there, and were very peculiarly situated. There was a tongue-shaped piece of the vaginal tissue which had for its base the neck of the uterus, and extended down into the vagina for about three inches. This piece was torn from the recto-vaginal septum. On each side of this tear there was a lateral one, extending down the full length of the vagina. There was also a laceration of the second degree of the perineum. The attending physician and myself concluded that the injuries were of such

an extent that we would better call in a third party to assist in repairing the damage. Dr. John Lear was called in and we were very much indebted to him for his assistance. The woman was etherized, placed upon her back, both legs flexed upon the abdomen, the vagina washed out with a potassium permanganate solution, and a piece of gauze packed into the mouth of the uterus; the vagina was held open by means of two Sims' specula. The tongue-shaped piece was first placed in position and fastened down with interrupted sutures, with the exception of the lower end which was trimmed off so as to get a clean edge; after this the lateral tears were closed in the same manner. The perineum was next sewed up. The sutures were all of silkworm gut. A carbolated gauze drain was placed into the vagina and a pad against the perineum. The legs were bandaged together. For the first seven days the drain and pad were changed twice in the twenty-four hours, after the vagina had been well washed out with a bichlorid solution of 1:4000. From this time the douche was only used once a day. The sutures were removed on the twelfth day, complete union having taken place. The internal medication consisted of quinin and ergotin, 2 grains of each, every three hours, and small doses of castor-oil whenever necessary to move the bowels. The maximum temperature for the first day was 100.8, the second day 101.2, the third day 102.4, the fourth day 100.8, the fifth day 100, the sixth day 100, the seventh day 99.8, the eighth day normal. At the present time she is enjoying good health.

The second case was a little girl of five years of age, on whom a rape had been committed. This laceration extended up the recto-vaginal septum for one and a half inches. The laceration was closed up at 10 o'clock at night by Drs. H. H. Herbst, John Lear, and myself. The patient was etherized, and the vagina and rectum washed out with a solution of potassium permanganate. The rectum was first closed with a continuous suture of silkworm gut. Here I would have preferred chromicized catgut, but had none at hand. The perineum and vagina were closed with interrupted sutures. A gauze drain was introduced and a pad of gauze placed against the perineum. The vagina was

douched twice a day with a bichlorid solution of 1 : 4000. The patient was kept on a fluid diet for ten days, when the bowels moved, after which she was given some solids. The sutures were removed with the exception of the continuous suture in the rectum on the fourteenth day. The patient made a good recovery and has complete control of the rectum. The great difficulty in this case was to find sufficient tissue in which to place the sutures.

In my opinion it will not do to lay down any cast-iron rules as to how and where the sutures should be introduced, but care should be taken to have the parts accurately joined together, so that the muscular tissues will unite. If this be the case we are almost certain to have a good result.

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EDITORIAL.

Smallpox.—Since the beginning of the present epidemic in Philadelphia, 204 cases have been reported. During the last five weeks there were about 150, and in August, 52 cases. During the week ending September 21st, there were 31 cases, and the indications are that the number of new cases is decreasing. The disease is confined mostly to the northwestern section of the city.

It is important that physicians in our vicinity be on the lookout to recognize any cases developing, and we should bear in mind how frequently, during the last year or two, the disease has been mistaken for chicken-pox. Dr. Jay F. Schomburg spoke on "Various Types of Smallpox," at the last session of the Pennsylvania State Medical Society Meeting.

Dispensary Abuse.—At the recent meeting of the Pennsyl-

vania State Medical Society this question was again discussed. As a remedy it was suggested that all applicants at dispensaries be required to record their names and addresses on a suitable register, and that such register be open for inspection to proper parties, the idea being that questionable cases might then be investigated.

If a suitable person could be appointed to follow up the work of investigation this plan might accomplish something, but if the idea is that the mere act of registering one's name will deter the unworthy from seeking free treatment, we think it will not prove a very valuable plan.

RECENT MEDICAL LITERATURE.

Diabetes Mellitus.—A. Desi, in an article in the *Medical News*, September 14, 1901, entitled "Medical Treatment of Diabetes," refers to the importance of diet. The important point is to reduce the carbohydrates. He thinks it is not necessary to withdraw these altogether unless for a very short time. By a careful dietary the starch may be reduced to a minimum.

In cases where gout coexists and the quantity of sugar is small he merely prescribes a diet suitable for the former. By actual experiment it should be determined how much starchy food a given patient can take without increasing the sugar in the urine, and then that amount may be allowed.

Dilatation of the Cervix Uteri in Obstetric Practice.—Garri-gues, of New York City, in the *Medical News*, gives in brief the methods of securing dilatation of the uterine cervix.

He says: The forceps should never be applied before the os is completely dilated. In cases where there is ample time he believes in securing dilatation by means of the natural uterine contractions. He would use for this purpose a vaginal douche of hot and cold water, with vaginal temperature. Or better, perhaps, insert a properly sterilized English bougie, No. 10, in the cavity of the uterus along its side. When uterine contractions have brought about sufficient dilatation, then use Barnes' dilators. Finally rupture the membranes to bring on labor pains. The injection of glycerine is condemned.

The dilatation of the cervix during labor is accomplished as follows :

First, certain drugs assist: An injection of atropine into the cervix ; painting the cervix and its canal with cocaine ; chloral hydrate, antipyrin, strychnin, quinin, or ipecacuanha internally.

Second, mechanical means: Tampon of the vagina, cervix, or uterus, dilatation of the cervix by the hands or instruments, Harris' method being an excellent one. Finally multiple small incisions or two to four deep incisions into the cervical tissues.

LOCAL NEWS ITEMS.

Lehigh Valley Railroad Surgeons' Association.—In the July Magazine, Geneva, N. Y., was mentioned in the proceedings as the place of the next annual meeting. This was a mistake, as the meeting will be held at Ithaca, N. Y.

Dr. J. S. Trexler, of Kutztown, died on September 24, 1901.

LEHIGH VALLEY MEDICAL MAGAZINE.

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OCTOBER, 1901.

No. 10.

ORIGINAL ARTICLES.

THE USE OF THE COBALT LENS BY THE GENERAL PRACTITIONER.

BY WILLIAM H. DUDLEY, M.D., Easton, Pa.

It has often occurred to the writer that the information which can be obtained by this small instrument, would frequently be of service to the general practitioner, if he possessed it and was familiar with its use.

There are many cases of high degree of hyperopic, or compound hyperopic astigmatism, or simple hyperopic astigmatism, which in the child may be mistaken for some form of myopia, if only the actions of the child are taken into account ; *viz.*, the holding of the book, or other near work in hand, near the eyes. As in myopia, his vision for distance is bad, and when this fact is considered, and the adopting of an especially near point for his reading, it is presumptive evidence of myopia, when as a matter of fact the reverse is the case.

The reason that the child with a high degree of some form of hyperopia holds his book near the eyes, is not because he gets clearer vision, but because, by the exercise of this high degree of accommodation which he possesses, he gets a relatively large image ; though still indistinct, he is able to get on better with his work.

As he gets older he cannot do this ; for now his accommodation is weaker, and the image is blurred at any point ; in fact so much so, that he is compelled to give up the struggle and resort to glasses.

Although a young child, if robust, can often manage to get on with as much as four or five diopters of hyperopia, or hyperopia and astigmatism, yet he does it to a great disadvantage to his later years ; for now his retina having never received distinct

images, has lost its ability to appreciate them when formed, and transmit them to the brain; hence, it is no uncommon observation to meet a patient who has carried three to four diopters of hyperopia or astigmatism, or both, till his thirtieth year, to find, when his accurate correction is adjusted, that his best vision is no more than $\frac{20}{70}$ for distance, nor better than No. 4 Jeagers' test types for near.

It is more often that the family physician is first consulted as to the cause of the child's indifferent vision, and it is he who can put the parent on the right track, and enable the child to grow up with accurate vision, both for far and near.

And now as to the cobalt lens and its use. This in reality is no lens at all, but a piece of plain glass, containing a certain amount of cobalt peroxide; this, when exposed to diffuse light, presents a beautiful blue, with a uniform tint. However, if a small point of light, such as a candle, is observed at a distance of from six to ten feet, the patient, if ametropic, will observe the light to be no longer uniform in color, but the center of the flame will be either blue or red, and its border of the opposite color. This is caused in the first place by the fact that cobalt-blue is not a perfect blue, but contains much red in its composition. Now the blue rays entering the eye, and having a greater refrangibility than the red, are focused at a nearer point than the red, and find their focal point in the vicinity of the plane of the macula of the short, or hyperopic eye, while the red rays, being less refracted, would find their focus at a point behind the plane of the macula, and are therefore thrown upon the retina in a more or less diffused fringe around the focal point of the blue rays. Of course, in a long or myopic eye, these conditions would naturally be reversed, and as a matter of fact experience proves this to be true.

In the application of these facts, we find that when a cobalt glass is placed before a hyperopic eye (an eye shorter than a normal eye) and the patient is directed to look at a candle flame from six to ten feet distant, he will notice that the center of the flame is blue, and the periphery red. Now in the appearance of the flame, much will depend upon the hyperopia present. If he has no more than three or four diopters of this error, the shape of the flame will be preserved and the colors ar-

ranged as above; but should the hyperopia amount to five diopters or more, the flame will lose its outline, and will become more or less spread out, and much better results will be obtained by placing the candle within two or three feet of the observer.

On the contrary, the myopic patient will see the flame with a bright red center and a blue fringe or border.

In simple hyperopic astigmatism, the flame will be drawn out more or less (depending upon the degree of the astigmatism) in a line at right angles to the axis of the astigmatism, the body of the light being blue, and having a red bar running across it.

In compound hyperopic astigmatism, the flame will be found to be drawn out at right angles to the axis of the astigmatism, the center of which will be blue while the edges of the drawn-out flame will be fringed with red.

In making these observations, it will be better to hold the glass quite close to the eye, and in all cases, where the arrangement of colors is not readily perceived, the observations will be more satisfactory if the light is brought nearer to the observer.

In compound myopic astigmatism, the center of the flame will always be red, the flame will be drawn out at right angles to the axis of the astigmatism, and the whole flame will be surrounded by a fringe of blue.

In mixed astigmatism, when a part of the astigmatism is hyperopic and part myopic, there will be a drawing out of the flame in two directions, at right angles to each other. In this case, the preponderance of the astigmatism will determine whether the greater portion of the flame will be blue, or red. If the myopia is in excess, the heavier bar in this cross will be red, with a bunch of blue on either side connected across the red bar by a faint line of blue, while if the hyperopic astigmatism be in excess, the reverse of these conditions will be observed.

After numerous experiments with this form of ametropia, I am of the opinion that this is the most difficult one to make a diagnosis of, unless you have a patient with fairly good powers of observation, and capable of describing accurately what he sees.

The use of the cobalt lens in the diagnosis of the various forms of ametropia, may be briefly summarized as follows:

Hyperopia. — Blue center surrounded by red.

Hyperopic Astigmatism, Simple.—Light drawn out opposite to axis of astigmatism. Center blue, and red bar across this.

Hyperopic Astigmatism, Compound.—Center blue, flame drawn out opposite to axis of astigmatism with a fringe of red all around.

Myopia.—Center of flame red, with blue border.

Myopic Astigmatism, Simple.—Flame drawn out opposite to axis of astigmatism. Center red, and bar of blue extending across this.

Myopic Astigmatism, Compound.—Flame drawn out opposite to axis of astigmatism. Center red, with fringe of blue all around.

Mixed Astigmatism.—Flame drawn out in two directions at right angles to each other, with a bar of red and blue crossing each other.

The cobalt lens is not intended to be used as a method of refraction, and can hardly be used successfully as such, but as an easy method of discovering the form of ametropia present; and for this purpose it may be used by any physician, by simply observing the foregoing rules without special knowledge of refraction.

I will state that this instrument can be obtained from any wholesale optician for from fifty cents to one dollar.

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EDITORIAL.

Medical Education Again.—If the daily press has correctly reported the transactions of the recent meeting of the Medical Society of Pennsylvania at Philadelphia, the subject of medical education received considerable attention. And as always, everywhere, when the question is discussed, medical colleges or certain unnamed colleges were blamed for the alleged deficiencies. They are accused of mercenary motives and not with the sole desire to properly train young men and women for the medical profession.

Without attempting to decide whether the charge is well founded or not, let us read a lesson between the lines of the charge itself.

As it is an exception to find other than physicians in the faculties of the medical colleges and as the faculty of each college decides who are to begin and who are to continue the study of

medicine, the charge is one involving the medical profession or a portion of it. While the specification is inducting improperly prepared students into the practice of medicine, the reason assigned for this specific action determines the character of the charge. It is said that these colleges are willing to do this because of the profit accruing to the members of their faculty. Were clergymen thus accused they would be charged with Simony ; if such charges were made against government officials, it would be malfeasance in office at the very least. It is a charge that certain members of the medical profession are willing to sacrifice the good of the profession for personal, selfish profit.

Were the medical profession jealous of its honor, its good name and fair fame, it would seem probable that such a charge would immediately be investigated, and, if the accused were found to be guilty, the condemned would be ostracized as unworthy of recognition in the profession he had so vilely injured. But has any one ever heard of such action being taken against a member of any medical college in the land? Of course every one knows that the members of some medical colleges are *persona non grata* to the bulk of the profession, but this relation is from other causes.

Two deductions can be made: Either the charges are not true, or the medical profession is not as jealous of its reputation as it ought to be—and if not, why not? Is the specification against the medical faculty the only one that can be framed under the charge? Are there no other ways by which a physician can debase his profession for personal ends?

The same meeting of the Medical Society of Pennsylvania discussed the dispensary evil. The harm resulting from this to the profession at large is many times greater than that wrought by the colleges. It is usually asserted when the dispensary evil is under discussion that its existence is caused by the overwhelming majority of the lay element in the management.

Suppose all physicians would hold to Lord Bacon's aphorism that a man is a debtor to his profession, and every appointment would be declined which afforded personal benefit at the expense of the profession at large, could the lay element control the cor-

rect living of the profession as is now asserted? We are not all members of a college faculty nor on a hospital staff, but are our skirts free? A recent instance in the consulting room of the writer of this, trite enough it is true, will aid to find an answer. The patient, seen for the first time, was giving an account of the previous medical history of the complaint for which she was now seeking advice. She had been under the care of Dr. X., of a distant city, and prior to that, of Dr. Y., in still another city. The comment was made that she had been in excellent hands when she was under Dr. Y's care; but the reply was that Dr. X. had not thought so. It so happened that the professional skill and reputation of both physicians was well known. The remark of Dr. X. was not an honest criticism but a desire to so control the patient that she would not think of consulting her first physician again. It was a stab at the profession for the betterment of self.

Let us not raise the stone to hurl at the medical teachers until we are sure we ought not receive a blow for the same reason; and, if we are sinless, before we hurl it let us be sure of our motive. Do we object to the illiterate student, so called because he is illiterate or is it because he has captured some of our practice, and the grievance is a personal one in its last analysis?

This article is not written in the defence of improperly prepared medical students. It endeavors to show that the evil of admitting such students into the medical profession is only one manifestation of a wide-spread lack of professional integrity, and is possible only for the reason that the generic cause is so wide-spread as to become a custom.

Because we recognize the condition is an added reason for maintaining a high educational standard for the intending physician. For the weeding-out process of sound educational methods will eliminate the greater number of those who are willing to live regardless of professional traditions or ethical principles.

It would not be fair to the facts in the case were it not said that the conditions are improving and the time is come when all such self-seeking will be seen in its true light.

RECENT MEDICAL LITERATURE

The *British Medical Journal*, of May 11, 1901, quotes Dethlepoen's (*Hospital Stedende*, January, 1901) report of a case of lupus of the face treated by ethyl chloride. The affected parts were frozen daily at first and subsequently on every second, and then every third day. After ten weeks' treatment the ulcers were healed, a smooth skin resulting.

Formaldehyde in Suppurative Otitis Media.—The *Therapeutic Gazette* quotes Dr. Wood's treatment, as given in *American Medicine*, of June 15, 1901. After cleansing the canal it is filled with an aqueous solution of formaldehyde, five drops to the ounce, no packing being employed. At home the patients syringe the ear with lysol, 15 to 30 drops to half a glass of warm water, and ten minutes later instil the formaldehyde solution, which is retained ten minutes. The instillation is repeated night and morning. In acute cases a weaker solution is employed. In more obstinate cases and in those with granulations, alcohol is added as follows :

Formaldehyde, 5 drops.
Alcohol (95 per cent.), 2 drachms.
Aqua, 1 ounce.

Proper treatment to the nose and throat is applied at the same time. Tonics are prescribed when indicated.

Removal of Powder Stains with Hydrogen Dioxide.—*American Medicine*, June 1, 1901, gives Rhoads' method of removing these marks by a dressing of glycerine one part, hydrogen dioxide three parts. A case is quoted in which there followed complete removal of the grains after a couple of days' treatment; (*Therapeutic Gazette*, September, 1901.)

LOCAL ITEMS.

The Northampton County Medical Society will hold its next meeting at the Eagle Hotel, Bethlehem, on October 18th. Papers by Drs. W. H. Dudley, of Easton, F. J. Hahn, of Bath, and Edgar Green, of Easton, are promised. Dr. W. L. Estes cordially invites all members to St. Luke's Day exercises at the hospital in the afternoon. The new operating pavilion, erected for the institution by Mr. Samuel Thomas, of Catasauqua, will be turned over to the trustees at that time, and will be open for inspection.

LEHIGH VALLEY MEDICAL MAGAZINE.

Vol. XII.

NOVEMBER, 1901.

No. 11.

ORIGINAL ARTICLES.

INTRAPERITONEAL DRAINAGE.¹

By FRANK ALLEMAN, M.D., Lancaster, Pa.

No subject of greater importance than that of intraperitoneal drainage confronts the abdominal surgeon to-day. It may also be safely asserted that there is no topic upon which surgeons are at greater variance with each other in their practice. On the one hand we hear of men who drain the majority of their cases, while on the other we have those who seldom, if ever, drain. This chaotic state of affairs reveals the imperfect state of abdominal surgery; indeed, Kelly has declared that the employment of a drain is a confession of imperfect work on the part of the surgeon.

Much time and labor have been spent, in laboratory and clinic, with a view to clearly defining the functional limits of the peritoneum, thereby determining the indications for the use of the drain.

The whole question of drainage seems to be based on the function of this great serous membrane and its anatomical relations. Thus, in order to fully understand the subject theoretically at least, it is necessary to have a proper conception of the normal peritoneum, both histological and physiological. It is also necessary to be thoroughly familiar with the normal anatomical area in its relations to the abdominal viscera. A lack of knowledge of both the anatomy and physiology of this extensive serous membrane has created a lack of confidence on the part of many an operator. Sound principles established in the laboratory by experimental studies of the physiology and pathology of this membrane have been carried into practice with wonderful success, so

¹ Read before the Lancaster City Pathological Society, July 26, 1901.

that we now operate with much greater reliance upon its ability to eliminate infectious matter. We have had a revolution in drainage in the last five or six years, many of those who pinned their faith on it having discarded it almost entirely. It is not now so much a question of when to drain, as how to drain; there is, however, much diversity of opinion on both points. Of one thing we are quite sure, and that is, drainage is fast growing less popular and falling into disuse.

My time is too short to permit of a review of the history of the subject. I might mention, however, that many years ago Ephraim McDowell, Nathan Smith and Clay, of England, obtained drainage by leaving the large pedicle ligatures projecting from the abdominal incision. They, with Koeberle, believed that a local gangrene and sloughing of the stump gave rise to septic matter in the abdominal cavity which, in turn, produced peritonitis.

Peaslee, of New York, in 1855, exploded this theory and gave the following well-grounded theories concerning the etiology of peritonitis and the septicemic condition that goes with it. He declared that "it will be found that septicemia, after abdominal operations, is actually produced by the absorption of decomposed fluids into the blood from the peritoneal cavity. These fluids were either:

- " 1. Blood oozing from raw surfaces or from the pedicle.
- " 2. Fluid from the tumor which had been left by the operation in the peritoneal cavity.
- " 3. Ascitic fluid, left or secreted after operation, in cases of ascites complicated with ovarian tumors.
- " 4. Pus in the peritoneal cavity, produced while some raw surface is healing by granulation."

Clark adds a fifth cause, that of pyogenic infection, and the etiology of septic peritonitis is complete.

It will be seen that Peaslee attributed the septic symptoms to the degeneration of fluids left in the peritoneal cavity. Here he was in error, for we now know, as Clark has shown, that these fluids act merely as culture mediums for pyogenic organisms.

Peaslee suggested that these stagnating fluids be removed by drainage through an opening in Douglas' cul-de-sac with

intraperitoneal irrigations of saline fluids. Sims, in 1872, advocated this teaching and practised it in all his cases. Drainage, at that time, gained a strong hold on the surgeons, so firm a footing that, notwithstanding the declarations of Schroeder, in 1875, that peritonitis arose from infection of the fluids in the peritoneal cavity and that the prevention of peritonitis depended on the exclusion of the infection, few surgeons were courageous enough to discard it. Some, however, have always protested against any form of drain, among them may be mentioned Zwirfel, Czemin and Olshausen, the last of whom declares it to be an illusion and a dangerous practice.

Clark, Kelly, Robb and Halstead have made a careful study of the subject. Clark has made a careful analysis of 1700 cases of abdominal section from the standpoint of intraperitoneal drainage. After studying the character of the fluids in the abdominal cavity, bacteriologically, and also making a bacteriological study of the drains themselves, he concludes that, (1) the drain produces traumatic and chemical irritation; (2) it delays wound healing; (3) it is not effectual; (4) it disturbs the normal currents of the peritoneum; (5) it causes the formation of a wall of adhesions about the drain and thus prevents the general peritoneum from participating in the work of absorption.

Although the above quoted authorities give drainage a narrow field in abdominal surgery, we still find the majority of surgeons depending on its use. It must be admitted, however, that with increasing knowledge of the resisting power of the peritoneum, we have increasing confidence in its ability to dispose of infectious material, and drainage is daily growing more unpopular.

Clark gives a careful résumé of the experimental work of Muscatello, Grawitz, Wenger, Metzler, and others, proving the enormous absorbing power of the peritoneum. He shows that both fluids and solids may pass through the endothelial layer of the peritoneum to the lymph spaces in the diaphragm. Very large quantities may be absorbed in a short time. The liquids carry foreign bodies from various parts of the abdominal cavity into the mediastinal lymph glands. Adler and Metzler show that the lymph channels are the true paths by which fluids are taken up and carried. Fluids are not carried by absorption directly into the blood as was formerly supposed. The normal

peritoneal currents are, per force, toward the diaphragm. Muscatello shows us that in the diaphragmatic peritoneum alone are the lymph spaces found. Wenger found that the surface of the peritoneum is almost equivalent to that of the skin—about 17,000 centimeters. It has enormous absorbing functions, taking up in an hour 3 to 8 per cent. of the entire body weight. He also found that, under the influence of very toxic or irritant substances, an equal amount of transudation into the peritoneal cavity may take place.

Muscatello has clearly demonstrated that not only is the diaphragmatic part of the peritoneum the place where the lymph from the peritoneal cavity is absorbed, but also that the mediastinal glands are the collecting organs for this area. His experiments also prove that the direction of the peritoneal currents is toward the diaphragm. Waterhouse's experiments show that the peritoneum has, under ordinary conditions, wonderful resisting powers to infectious organisms. He injected 6 centimeters of a culture of staphylococcus aureus into the abdominal cavity of a number of dogs and they all survived. The same results were obtained with the streptococcus, bacillus pyocyaneus, and the bacillus coli communis. In order to learn the results in *conditions simulating those found after abdominal operations*, he first injected small amounts of urine and blood, following this with the injection of the pyogenic organisms, and he obtained the same results. Thus we see that the absorptive power is enormous and the resistance correspondingly so. There seems to be not only a marked local immunity, but also a general immunity to infection. It must not be forgotten, however, that an inundated or diseased peritoneum means an altered absorbing power, and a tardy absorption means the possibility of a collection of stagnant fluid or other material within the peritoneal cavity. The etiology of peritonitis cannot be overlooked here, for with it the subject of drainage goes hand in hand.

Shall we drain at all in abdominal surgery? Armed with at least a book knowledge of the capabilities of the peritoneum, as to its wonderful absorbing powers and resistance to infection, we set out to determine whether or not we shall place our full dependence upon it.

Here it is necessary to consider the effects of variously diseased

conditions of the membrane on its physiology. We have learned that in the presence of irritants the danger of peritonitis from infection is greatly increased. Waterhouse has shown that a diseased area means a delayed absorption, and that tardy absorption in the presence of infectious micro-organisms means a probable infectious peritonitis. Thus it will be seen that, although the peritoneum under normal conditions can dispose of infectious material, a thickened or diseased peritoneum has a correspondingly altered function, *i. e.*, weakened absorptive power and resistance. It seems irrational to thrust one's whole dependence on the peritoneum.

Other points to be considered in this connection are the character of fluids to be absorbed and disposed of and the virulence of the infection, if any. It may be possible to cleanse a peritoneum which has been bathed in the pus from a ruptured pus tube or ovarian abscess, and close up the abdomen without drainage, but it is quite a different matter to attempt this procedure in the case of an appendiceal abscess. I have seen two patients in the last year, who had free pus in the peritoneal cavity, get well without drainage, but they were both cases of chronic salpingitis with pus.

What are the indications for drainage? The indications for drainage are determined very largely by the operator and his technique. The accomplished abdominal surgeon, who operates on large numbers of cases with every advantage and facility for absolute asepsis, will drain fewer cases than the occasional operator, especially he who is compelled to open up the peritoneal cavity in rural districts. Kelly and others make a bacteriological examination of the fluids at the time of operation, determining the use of drainage by these results. If very few or no organisms are found he does not drain. The country operator is not able, as a rule, to carry out this detail, being compelled to use his eyes and surgical instinct, and common sense, to determine the question. A perfect technique will, beyond question, eliminate certain indications for drainage.

Greater attention to the minor details in the toilet of the peritoneum, a perfect and consistent asepsis, carefully controlling all hemorrhage or oozing, avoiding prolonged evisceration and manipulation of such delicate structures as the bowel, delicacy

of touch, avoidance of undue violence in breaking up adhesions and preserving normal tissues and relations, all go to make up a perfect technique which will solve the question of drainage on more than one occasion.

The use of rubber gloves, if consistent with the laws of asepsis, is to be indorsed, and the fewer hands used in the peritoneal cavity the better for the patient. If gloves are to be worn, then all connected with the operation are to wear them, otherwise their use is inconsistent. Care should be exercised in preventing the rupture of abscesses, pus tubes, and localized collections of pus, for a peritoneum once soiled is ever in danger.

The use of hydrogen dioxide and normal salt solution is of unquestionable value. In all cases where pus has soiled the peritoneum it should be first sponged dry, then washed with hydrogen dioxide and finally flushed with normal salt solution. We do not believe this procedure destroys the endothelial layer if the tissues are delicately handled. The one exception to this rule is that of a localized abscess which is distinctly walled off. Here the dry sponging alone will be sufficient; if it be pus of a virulent type, there is danger, in using the salt solution, of spreading the infection to remote parts of the peritoneal cavity.

Is the use of the drain always a confession of imperfect work on the part of the operator? This seems hardly a fair conclusion when one bears in mind that the surgeon is often confronted with a peritoneum, the functional power of which is more or less arrested by an advanced stage of disease. Given a reasonably good area of sound peritoneum on which to work and rely, and, I venture to say, we all shall soon feel as confident and secure on closing the abdomen as those who have practically discarded the drain.

It is generally admitted that there is a class of cases which absolutely demands drainage. Clark limits the use of drainage to:

1. Cases of appendicitis where the tissues are so infiltrated with inflammatory products that secure closure of the stump is thereby prevented, after amputating the appendix, or where the appendix has ruptured and caused a general peritonitis or localized abscess.

2. In localized collections of pus in the pelvis where the abscess sac cannot be completely enucleated.

3. In suture of the intestine, where there is doubt as to the integrity of the suturing.

4. Excision of fistulous tracts leading from the intestine to the abdominal wall.

5. In purulent peritonitis.

It seems but reasonable to add to the above classification :

1. Those cases in which extensive adhesions have been broken up, leaving an extensive raw surface.

2. When it has been impossible to remove all of the secreting surface of a cyst wall.

3. Where one is not certain of having removed all necrotic tissue from a broken-down area.

4. In cases of excessive and obstinate oozing.

5. Where the peritoneum shows general thickening from tubercular disease with ascites.

6. In cases of rupture of a hollow viscus with escape of contents, excepting that of the bladder.

7. In cases of perforating typhoid ulcer and gastric ulcer.

When in doubt, always drain. It may do no good in non-infected cases, but it certainly does no harm. If there is excessive serous discharge, it will take this up by capillarity and thus relieve the peritoneum. We believe the force which governs drainage to be greater than the force which governs the peritoneal currents. Moreover, we are sure of the capillarity of our drains, whereas we are not always sure of the absorptive power of a more or less crippled peritoneum.

The possible dangers of drainage must not be overlooked in this connection. A drainage-tube may do incalculable harm if left too long in the abdomen. Many cases have been drained in this way, the tube being left *in situ* for days, and the surgeon has been much chagrined to find, a day or so after removal, a fecal fistula or obstruction of the bowel. Even gauze drains tend to retard local healing and should be removed as soon as they have served their purpose. It is rarely necessary to leave a gauze or other drain in longer than three or four days. The continued presence of gauze, as pointed out by Kelly, acts as a traumatic irritant to the peritoneum and results in destruction and exfoliation of

its endothelium. Gauze packing and gauze drains must not be confounded. The packing is placed in position firmly to sequestrate a diseased area, enhancing and perfecting the formation of adhesions, whereas the gauze drain is very loosely packed or placed in a cavity to be emptied by capillarity.

The possibility of infection through the drainage tract must not be forgotten. Robb, Ghrisky and others have shown that, in nearly fifty per cent. of cases drained, the drain, whether tube or gauze, contained some form of living pyogenic organism. Perfect asepsis and thorough antisepsis will go far towards removing this danger.

A word in regard to methods of drainage. The glass drainage tube is a dangerous instrument in the hands of an inexperienced operator. I believe the time is at hand when we shall dispense with its use. In general purulent peritonitis and large deeply seated abscess, it may be of service, but should be removed in forty-eight hours. The tube should be surrounded by gauze and contain in its lumen gauze or wicking loosely packed. As to gauze or other drains, it is obvious that, if we are to use a capillary drain, the material having the best properties for capillary attraction is the one to be selected. Plain, sterile gauze meets the requirements in the vast majority of cases, indeed, I venture to say that, in all but tubercular cases, a medicated gauze is uncalled for. It will be found that the iodoform gauze usually furnished is much too moist and the meshes so clogged with the antiseptic that its essential value is almost destroyed. It is advisable to dip such gauzes into sterile water and gently squeeze them out before inserting them. The dry gauze lightly dusted with iodoform is just as efficient.

In placing a drain, each piece of gauze used should be folded upon itself in accordion or fan-like fashion as it is introduced, the outer ends being left long. If a cavity is to be walled off with gauze strips, these should be numbered and on removal they should be taken out in reversed order. The strip which is to act as the drain should, in such instances, be placed *in situ* last and loosely packed.

Morris, of New York, has devised an admirable drain which consists of aseptic gauze or wicking surrounded by sterile Lister's silk protective. It does away with the glass tube and has

the advantage of not adhering to parts coming in contact, which is the great objection to plain gauze.

The ends of a gauze drain should always be left long, and carried from the abdominal incision down to the flank or side of the patient, so that they are at a level lower than that of the incision. It is well to place a layer of silk protective next to the skin to prevent irritation from discharges and infection of the wound.

In conclusion, let me say that this paper, which is in large part a review of the literature on the subject of drainage, is intended as a plea to the young, inexperienced, and occasional operator for a more careful and thoughtful technique in abdominal operations. I fear we young men are too superficial, too hasty in our anxiety to get through with an operation. Greater attention to the minor details of operative procedures will frequently solve the problem of drainage for us. The necessity for preserving normal tissues and relations, the complete removal of diseased tissues and especially the covering over of raw surfaces with healthy peritoneum should be uppermost in our minds.

As adjuncts to the methods of drainage above considered, the subcutaneous and intravenous injections of normal salt solution are of great value in cases of septic peritonitis. The kidneys and bowel are the normal avenues for drainage and should be kept open and active in septic cases.

I can but endorse the opinion of Dr. Frank Hartley on this subject. He says that, "no matter how much we may rely on our antisepsis preparatory to operation and on our asepsis during operation, we are not yet able to exclude microbic infection in all cases of simple wounds of the abdominal wall healing by first intention.

"If we cannot accomplish this in favorable situations, how much less are we able to accomplish it in an already infected area?

"We are never certain of having removed all infection; we certainly leave enough for the peritoneal resorption even when drainage is used.

"The peritoneum has as much as it can do to take care of what we leave behind, without our imposing further burdens upon it."

BIBLIOGRAPHY.

- Kelly, "Operative Gynecology."
 Clark, Johns Hopkins Reports, 1898.
 "American Text-Book of Gynecology."
 "American Year Book Medicine and Surgery."
 "Pozzi on Gynecology."
 Frederick Treres, "Operative Surgery."
 MacDonald's "Surgical Diagnosis and Treatment."
Progressive Medicine, 1897.
Journal American Med. Association, Aug., 1901.

REPORT OF A CASE OF ADDISON'S DISEASE.¹

By EDGAR MOORE GREEN, A.M., M.D., Easton, Pa.

Inasmuch as cases of Addison's Disease are so rare in this country it has occurred to me that members of the profession might be interested in a report of a case which I had the privilege of seeing some time ago.

On May 29th I was consulted by a lady with regard to her health. She was of slender build, small stature, about 40 years of age, complained of repeated attacks of gastric trouble with vomiting and said that she thought she was in a bilious condition because her skin had become so yellow, in fact almost brown. I noticed that there was no discoloration of the conjunctiva and therefore concluded that there could be no jaundice about this condition. In fact the conjunctiva had a peculiar pearly hue, which I believe has been stated by some authorities to be frequently seen in persons suffering with this disease. As the bowel was so distended with gas as to make the abdomen very tympanitic it was impossible to outline the internal organs. Carminative remedies were therefore given to correct this condition, hoping later to be able to make a more thorough examination. She again called at my office on the evening of June 2nd, just four days later, when she complained of great discomfort in her stomach, and the abdomen was still found to be much distended with gas. Carminatives were again prescribed and also remedies to correct her sick stomach. On the morning of June 4th I was called to see her at her home and found her vomiting continuously and complaining of considerable pain in the abdomen.

¹ Abstract of a paper read before the Northampton County Medical Society, Oct 18th 1901.

All efforts to settle the stomach or of giving food or medicine proved fruitless. Vomiting continued throughout the day with marked failure of strength and increased rapidity of pulse. By this time I was convinced that the patient was suffering with Addison's Disease, although surprised to see a case because of its great rarity. The following morning, June 5th, I made an early call upon my patient and found her sinking rapidly. She died before noon on that day. Fortunately, the family consented to an autopsy being made, and with the assistance of Drs. Kotz and Dudley the body was examined. I might say just here that while a student at the Medical Department of the University of Pennsylvania I had seen two cases of this disease. They were both males, and, singularly too, were both hunters in the Allegheny mountains. The husband of my patient has given me the following outline of her personal and family history: She had rarely been ill during her life except with various forms of gastric trouble. She was born on a farm of about 60 acres and during her early years had to do a great deal of the work of a hired man, such work at least as a girl can do, so that at that time her life was quite an active one. After she became of age she attended school for several terms. She married at the age of 25, and during the first five years after that her life was an active one, but after that she became more engaged in writing for her husband, who was a professional stenographer, and consequently led a rather inactive life. For some years after her marriage, especially at a time of mental strain, she was troubled with severe bilious attacks, as the family called them, with vomiting of bile, and at these times would be quite prostrated. After five or six years this passed away and she thought her general health much improved. She always had a dark complexion and was always inclined to be sallow. Her husband stated that he was particularly impressed with the marked sallowness of her skin during the month of January previous to her death. For a year or more before her death she failed in strength, and, in fact, during this period of time it was noticed that the heat of the summer seemed to oppress her very much more than ordinarily. It was impossible for me to ascertain the exact length of time during which she had a return of the so-called bilious attacks, as these had been so numerous in the

years of her married life that it was easy to see that the return of them would not excite any great surprise.

FAMILY HISTORY.

Her parents are still living. Her paternal grandfather died young from habits of intoxication, the paternal grandmother is said to have been a very strong and vigorous woman (though small in stature) who, almost unaided, raised a large family ; none of these, however, developed very robust health. The maternal grandfather was a man of vigorous constitution and, apparently, lived to a good age. Of his children, however, only one seemed to be possessed of much stamina. Two or three of his children died of consumption. Of the patient's own family one brother and two sisters are still living, one sister died at the age of 12, another died three or four years before my own patient, leaving one son who seems to be quite healthy. This sister I was told had died of a malady similar to that of my own patient. I was never able to corroborate this statement, although one or two members of her family told me that their ailments were certainly very similar. Her sister died at the age of about 30.

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EDITORIAL.

Cranks.—The present smallpox epidemic and the consequent wave of vaccination has again spurred on the antivaccination crank to make himself heard. The following letter, recently received at one of the hospitals in this community, is such an amusing production of one of the genus referred to, that it is quoted for the edification of our readers:

“At the request of my guides I write to ask you to use natural and curative agencies in your hospitals, such as natural and pure diet (fruit and hot fruit drinks can eradicate any disease), curative clothing, hot baths and bathing. All drugs, operations, impure food and drink (flesh, fowl, fish, and alcohol) are forbidden in the spirit world, therefore against God's laws and a healthy soul and body. Black is the symbol of death and decay; it comes into the world through evil agency, is against God's divine laws and ought to be abolished from the earth.

“Your guides earnestly pray that you will help us in these important matters, and at their earnest request we must tell you

that all vaccinators will be punished in this or the spirit world, as most disease is due to the dirt and poison of vaccine."

How the medical profession, who have been extensively engaged in vaccinations recently, must quake on reading this dire prediction of punishment to come !

LOCAL NEWS ITEMS.

South Bethlehem has two cases of smallpox. These initial cases have, fortunately, not occurred in the crowded downtown district, and as the people are being vaccinated in large numbers and the schools have required pupils to be vaccinated, there is good reason to hope no further spread of the disease may take place.

The Mercy Hospital, Pittsburg, Pa., has established a department for the treatment of patients bitten by rabid animals. The method followed is that of M. Pasteur. Dr. A. Let  v   is in charge. Patients are required to remain 20 days. The fee is \$150, in advance.

The Northampton County Medical Society held its regular business meeting at the Eagle Hotel, Bethlehem, Pa., on Oct. 18th. Dr. Edgar M. Green presented a paper entitled "Report of a Case of Addison's Disease." An abstract appears in this issue of the MAGAZINE. Dr. W. H. Dudley gave a paper on "Sympathetic Ophthalmia," which will appear in December. Dr. F. J. Hahn had a very interesting report of a case on "Diabetes in a Boy." The paper will be published in December.

St. Luke's Hospital, South Bethlehem, Pa., "Hospital Day" exercises were held Oct. 18th. The annual address on "The Hospital and Its Evolution," was delivered by Dr. F. P. Foster, of New York City. Dr. W. L. Estes presented the medical and surgical statistics for the year just completed, of which the following is an extract :

HOUSE CASES.			
	Males.	Females.	Total.
Patients admitted during the year...	400	237	637
Children born in the hospital.....	1	1	2
Remaining Oct. 1, 1900.....	22	21	43
Total number house cases treated..	423	259	682
Discharged.....	359	235	594
New-born children discharged.....	1	1	2
Died.....	33	8	41
Remaining Oct. 1, 1901.....	30	16	46

Of the 682 house cases treated 135 were medical and 547 surgical.

The general mortality rate was 5.86 per cent. ; seven of the fatal cases were admitted in hopeless conditions. Subtracting these would reduce the mortality rate to 4.83 per cent. Whole number of days in the hospital, 16,533. Average number of days for each patient, 24.2. Daily average number of patients, 45.28.

Number of operations performed on house patients, 370. Deaths after operation, 15. Percentage of mortality after operations, 4.05 per cent. Four of the cases operated on were in hopeless conditions ; subtracting these would leave 11 deaths, and a mortality percentage of 2.97 per cent. Operations performed on dispensary patients, 50. Dispensary cases treated during the year, 1104. Total number of visits of dispensary cases, 4768

After the exercises were completed the new operation pavilion, erected by Mr. Samuel Thomas, of Catasauqua, in memory of his wife, was thrown open for inspection. Many expressions of approval were heard from the visiting doctors. The pavilion contains the following : An operation room, etherizing and recovery room, sterilizing room, two dressing rooms. These make up the first floor. The basement is divided into three rooms for the preparation and storing of surgical dressings. The operation room presents all the best features of the most modern rooms for this purpose, the walls consisting of white marble and enamel, and with tiled floor. The furniture, cases, instruments, operation table, etc., are all new, the gift of Mr. Thomas. The hospital is to be congratulated on now having every equipment for taking care of its varied work, and this community owes its gratitude to Mr. Thomas for his magnificent gift.

BOOK REVIEWS.

THE PHYSICIAN'S VISITING LIST (LINDSAY AND BLAKISTON) FOR 1902. Fifty-first year of publication. Philadelphia : P. Blakiston's Son & Co. Price for 25 patients per day or week, \$1.00. Fifty patients, \$1.25. Fifty patients, 2 volumes, \$2.00. Seventy-five patients, 2 volumes, \$2.00. One hundred patients, 2 volumes, \$2.25.

This standard visiting list is of convenient size and is neatly and compactly arranged. It contains a calendar, comparison of

weights and measures of different systems, dose table, thermometer table, and handy facts for ready reference in emergencies, besides blank leaves to be used for various purposes indicated.

THE PHYSICIAN'S POCKET ACCOUNT BOOK, consisting of a manilla-bound book of 208 pages and a leather case. By J. J. Taylor, M.D. Price, \$1.00, complete. Subsequent books to fill the case, 40 cents each, or three for \$1.00. Published by The Medical Council, Philadelphia.

This book is $4\frac{1}{2} \times 7\frac{3}{4}$ inches and contains 144 pages for principal accounts, with pages for balances due brought forward. It is intended as a complete record of the account, always at hand, and requiring no reentry or posting.

PAMPHLETS RECEIVED.

Cheatham, William, M.D. Affections of the Eye and Its Appendages in Bright's Disease.—*Reprint.*

Bulkley, L. Duncan, A.M., M.D. Syphilis as a Non-Venereal Disease, with a Plea for the Legal Control of Syphilis.—*Reprint.*

Benedict, A. L., M.D. May a Hospital Steal Cases?—*Reprint.*

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No. 12.

CARCINOMA IN CHOLELITHIASIS.

BY CHARLES F. NASSAU, M.D., Philadelphia, Pa., Surgeon to St. Joseph's Hospital, Philadelphia, Pa.

The problem of the diagnosis between cholelithiasis and malignant disease of the bile ducts or adjacent structures, which by encroaching upon the caliber of the ducts causes an obstructive jaundice, is an interesting one.

As these diseases coexist in a certain percentage of cases I would emphasize the fact that the exact diagnosis is often complicated. So many persons have at some time suffered from biliary colic indicative of gallstone disease that with a more perfect knowledge of the danger of cancer being the outcome of such trouble, operative methods of cure should at least be carefully considered.

According to Kehr it is an uncontrovertible fact that the concretions often furnish the stimulus to cancer formation. Courvoisier found gallstones in 87.5 per cent., and Delano Ames in 95.4 per cent. of cases of gall-bladder cancer. Schroeder states that 14 per cent. of gallstone sufferers ultimately develop carcinoma. In the acute inflammatory affections of the gall-bladder, especially when associated with persistent variations of temperature, with or without jaundice, the gall-bladder should at once be drained in order to prevent the infection from spreading.

Many patients suffer for years from vague abdominal pains without ever having had jaundice, who undoubtedly have stones in the gall-bladder. Of course, a stone in the common duct large enough to cause an obstruction to the flow of bile at once gives rise to symptoms so severe as to demand treatment. Whether this treatment shall be palliative or radical lies, for the most part, with the attending physician.

After careful medical treatment, even though the patient finds relief, the removal of the calculi is always advisable as cessation

of pain does not necessarily indicate that the stones have been passed. Indeed, it is still a question whether stones in the gall-bladder, not producing obstruction, cause pain in the absence of an acute cholecystitis. It is easy to imagine in such cases that the long-continued irritation from the calculi might be the determining factor of a malignant neoplasm. In early operations the mortality of a simple cholecystostomy is extremely low.

Choledochotomy, of course, has a slightly higher mortality.

Cystectomy is indicated in those cases where one finds a shrunken gall-bladder usually tightly filled with stones; it is very little more dangerous than a simple cholecystostomy, and at once relieves the patient of the danger of further calculus formation in the gall-bladder. It is in these cases which have often been free from acute attacks for a long time, that the pain is the result of a preexistent pericholecystitis having caused adhesions to form between the gall-bladder and adjacent structures.

The immediate closure of the gall-bladder after cholecystotomy, the so-called ideal operation, is in my opinion a most pernicious practice. The performance of cholecystostomy in two stages is also to be condemned because a stone may be felt in the gall-bladder at the first operation and slip through the cystic into the common duct, and be beyond reach when the gall-bladder is opened later. In every case in which operation is considered, if there has been jaundice of long standing and the development of ascites with emaciation of the patient, it is always possible that a carcinoma may be the cause of the blocking up of the common duct. In these cases one must remember that the mortality of operation is very great.

This high mortality is not so often caused by the shock of operation or by sepsis as it is by the hemorrhage to which these patients are peculiarly liable. Indeed, in many cases the bleeding cannot be controlled notwithstanding careful ligation, gelatine injections, or any other aid in checking hemorrhage. The exact cause of this condition has never been satisfactorily explained but it is supposed to be due to a diminution in the coagulability of blood due to the presence of bile. When the jaundice is not marked, and is of recent occurrence, then the danger of bleeding from this cause is correspondingly diminished.

The following report may be of some interest as it shows that great relief can be given these cases even when there is no hope of cure. In this case while calculi were not found it was no proof of their absence as the common duct was too tensely distended with bile to admit of feeling any but an enormous stone. After the opening was made in the gall-bladder and the anastomosis with the bowel completed it was not thought wise to hunt again for the common duct.

H. K., aged 29 years, bartender, was admitted to the medical ward of St. Joseph's Hospital under the care of my colleague, Dr. Prendergast, with whom I saw him in consultation several days after admission, when he was transferred to the surgical side. The patient was intensely jaundiced. Slight emaciation. Is suffering much pain. Three months ago he began to have pain to the right of the umbilicus and in the epigastrium, radiating toward the right shoulder.

After a severe attack of pain and vomiting, which he attributed to indiscretion in diet, he noticed slight jaundice. While before these severe attacks he had for years past had cramp-like attacks of abdominal pain, he was never before jaundiced. At this period he was under care of a physician, who treated him for "cirrhosis" of the liver. Has been tapped once and a small quantity of ascitic fluid removed. This was not an unreasonable error as the patient was a free user of alcohol.

On admission there was a slight abdominal enlargement due to ascites. The fluid was free, and not present in great quantity. The liver could be palpated and the gall-bladder outlined without difficulty. This condition of affairs is always highly suspicious and is always present in malignant growths, blocking the bile ducts. Pain, on pressure over the enlarged gall-bladder, was not marked. No new growth could be found before operation. His stools were putty-colored. Urine was deeply bile-stained, and contained a slight amount of albumen but no casts.

The diagnosis lay between a large stone in the common duct, with a cirrhosis of the liver at the same time, or a malignant growth, compressing the common bile duct at some point. There was no thought of a carcinoma of the stomach nor was a pancreatic growth specifically mentioned during the examination.

Operation, September 11, 1899. Cholecystenteroanastomosis. Ether anesthesia. Rubber gloves worn. Ligatures and fine sutures of silk. Abdomen closed by seven buried silver wire mattress sutures. Subcuticular silver suture. Silver leaf on skin.

A 12 cm. long incision was made through the right rectus muscle from the border of the ribs downwards. Before opening the peritoneum, all bleeding points to the number of nearly 40 required ligature. On opening the peritoneum, there escaped about 2 liters of bile-stained ascitic fluid. The liver appeared somewhat small. The gall-bladder was about the size of a large pear, and was nowhere adherent. It was tensely distended, the walls being quite thin. Passing the finger down along the cystic duct, no stones could be felt. The common duct was then palpated throughout its course. This was easy to do as it was distended with bile to the size of the ring finger.

At a point beyond the foramen of Winslow the common duct was lost in a mass of stony hardness about the size of a hen's egg. This, I am sure, was a carcinoma of the pancreas, and as several slightly enlarged retroperitoneal glands could be palpated no further search for the exact seat of the growth was persisted in. It was now plain that but one procedure would relieve the patient, *viz.*, cholecystenterostomy. I must here protest against the performance of this operation as a routine measure for avoiding external drainage, as advised by some surgeons.

It has been demonstrated that implanting the ureters in the rectum practically means the death of the patient from pyelonephritis. How much the more should we be careful not to deliberately allow fecal matter to enter the gall-bladder in order to avoid a few weeks or months of external drainage. The establishment of a fistula between gall-bladder and bowel should, therefore, be an operation of necessity and not of choice. Having no alternative, then, the loop of small intestine nearest to the gall-bladder, which could be drawn over without the slightest tension, was selected. A large quantity of gauze was packed between the abdominal wall and liver, the gall-bladder and the lateral abdominal wall; then beneath the gall-bladder and to the left of it, thus completely walling off the other abdominal contents from the immediate vicinity of the field of operation.

Two traction sutures were introduced at the fundus of the gall-bladder and two more at a convenient portion of the small intestine. The gall-bladder was then aspirated between the two sutures and after being emptied it immediately contracted to nearly normal size.

The bowel and gall-bladder were then united in a slightly curved line by a number of Halsted's mattress sutures of fine silk, after which the walls of each were incised 5 mm. above the line of suture for a distance of 2.5 cm. The cut edges of bowel and gall-bladder were then carefully sewed together with a continuous suture. This stitch embraced all the coats both of gall-bladder and intestine. The anastomosis was then completed by the introduction of a sufficient number of mattress sutures to complete the oval line of the wished-for union. The newly-made fistula then occupied the long diameter of the oval in the long axis of the intestine. Through this opening the bile could freely enter the intestine.

The point of union was copiously irrigated with hot normal salt solution, the gauze packing removed when it was seen that the bowel lay against the gall-bladder without the slightest tension,—a condition essential for a successful result.

The peritoneum was closed by a continuous silk suture. The muscle and aponeurosis were united by seven buried silver wire mattress sutures, after the method of Dr. Halsted. In the skin a subcutaneous silver wire suture. Dressing of silver leaf and sterile gauze.

The patient had an uneventful recovery. Highest temperature, 100° F., on the evening of the second day. The wound was dressed for the first time on the 14th day, when the skin suture was removed. Healing *per primam*.

The first bowel movement after operation showed presence of bile and from this time forward the feces improved in color and soon became normal. Gradually the skin cleared up, and when he was discharged on October 3, 1899, there remained a very slight degree of jaundice.

The patient was kept under observation, and continued to improve. He gained in weight and was almost entirely free from pain until January, 1900, when the ascites required tapping.

From this time he gradually grew weaker. Without suffering to any great extent he died about the 20th of March, 1900. No autopsy could be obtained.

SYMPATHETIC OPHTHALMIA WITH REPORT OF A CASE.¹

BY WILLIAM H. DUDLEY, M.D., Easton, Pa., Ophthalmic and Aural Surgeon to the Easton Hospital.

Of all the conditions which confront the ophthalmic surgeon, there is none in which an accurate knowledge of the history of the disease, a clear understanding of the case in hand, as well as the weight of responsibility resting upon the surgeon, is equal to the one in question.

To be sure there are cases in which the course is plain and the indications unquestionable; and here the surgeon has but to make a square statement of facts to the patient, who must assume all responsibilities; but there are others in which the injury *per se* is slight, and it is beyond the ken of mortal man to forecast the result, even with the most extensive knowledge of the history of the condition; and it is these cases which will often give the surgeon much anxiety.

The condition was recognized as early as the middle of the 17th century, though its importance was not appreciated till 1844 when McKenzie described it as a distinct disease and one accompanied with great danger.

The list of causes is quite numerous, among which may be mentioned: traction of the iris upon an ectatic corneal cicatrix; prolapsus of iris at corneal margin; shrunken or puckered scars, entangling ciliary body; rupture of the globe; operations for extraction of cataracts when complicated by entanglement of iris, or capsule, or succeeded by irido-chorioditis; sclerotomy; wounds to the lens; calcified lenses; luxations of the lens, whether by accident or intentional; foreign bodies in the eye; cysticerci; burns of the cornea and puckering of the cicatrix of the orbital tissues, following enucleation.

Of all these causes, by far the most frequent is the penetrating wound of the cornea, and ciliary body; and this occurs so often, that this region has received the name of the "danger zone"; and injuries here although made with clean instruments,

¹ Read before the Northampton County Medical Society, October 18, 1901.

and the wound kept aseptic while healing, are prone to be followed by an irritable condition, which, if nothing worse occurs, will cause the patient to be ever conscious that he has an eye, and also, of the changes of the weather; and inasmuch as it is a known source of danger, it should receive careful watching, even should it retain some useful vision; and on the appearance of sympathetic trouble the injured eye should be removed. This is a rule to which there is an exception which will be mentioned later.

As to the time which may elapse between the injury and the onset of inflammation in the sympathizing eye, there appears to be no limit fixed. The shortest time I have seen was one week; and there are cases—one reported by Dr. H. Knapp, of New York, when 45 years is said to have elapsed, though without question the period wherein the greatest danger lies is from the date of the injury to the end of the second month. At all events, a patient having had an injury of this character, can never feel entirely safe so long as he retains his injured eye.

The symptoms in the sympathizing eye are: circumcorneal injection, the iris will lose its bright color, and take on either a dull brown, or darkish hue—when compared with a normal eye—and its luster will be wanting; often the pupil will be small, but this is not an invariable rule. Sometimes before the anterior segment of the eye takes on important changes, the ophthalmoscope will reveal an optic neuritis, or a neuroretinitis; and in some cases this lesion will predominate throughout the course of the disease.

In the serous form, the pupil will incline to dilate, the tension will increase and the posterior surface of the cornea will become covered with fine dots. As the disease advances, the redness of the sclera will increase, the anterior chamber become more or less cloudy, and close inspection will show a pupillary membrane filling its area; at the same time extensive changes are taking place in the interior. These changes consist of an extension of inflammation backwards from the ciliary body involving the choroid and retina, which are accompanied by an exudation into the vitreous, which later becomes organized into connective tissue, and still later will undergo the changes which always take place in new connective tissue; *viz.*, contraction,

which will be accompanied by a detachment of the retina. These eyes may continue tender on pressure and will now become soft to the touch, and get smaller; and if one of these eyes were now enucleated, it would present a four-square appearance, due to the flattening of its sides by the pressure of the recti muscles. The eye is now hopelessly blind, and if the other one is blind also, which is usually so from the injury, the patient must pass the remainder of his existence in darkness.

The cases which cause the surgeon the most anxiety, are those in which the injury is moderate: It may be a shot wound, the shot passing entirely through the eye, and the eye retaining a certain amount of vision; it may be a punctured wound, repairing with some cyclitis, preserving some sight, and the patient does not present himself to the surgeon till he already has a sympathetic ophthalmia.

In some of these cases, the sympathizing eye will go on to destruction, whatever you do. It is now too late to expect much from enucleation of the injured eye, and ultimately the injured eye may be the patient's only dependence. Knowing this to be possible, the surgeon will hesitate to remove an injured eye having serviceable vision, with its fellow going slowly, though surely through the varying stages of sympathetic ophthalmia. The above condition is the exception referred to in the earlier part of this paper.

The manner in which inflammation is transmitted from the injured eye to its fellow, has been the subject of much study and experiment. It was the belief of those who made the earlier studies that the mode of transmission was through the sympathetic system; hence its name sympathetic ophthalmia.

McKenzie, who discussed this question in 1840, believed that the route lay by the way of the optic nerves. Eighteen years later (1858) H. Muller studied some eyes which had been enucleated with this disease, and found changes in the ciliary nerves which led him to believe that these were the paths by which the inflammation traveled; and this opinion was fortified by that of Goldziecher, who published the results of his studies in 1877. More recently Deutschman, who has given this subject much attention, argues, with much vigor, that the disease is transmitted by certain cocci, and that they are carried along the

lymph spaces of the optic nerve sheath. The fact that in most of the cases studied, one condition was present to the exclusion of the others, gives credence to each theory; and it seems probable, therefore, that these various modes of transmission may each, in certain cases, be responsible for the cases in question.

I will briefly relate a case coming under my own observation within the past few months, which is not without interest: Michael Deak, age 28, came to the Easton Hospital, August 17th with a penetrating wound of the right eye, beginning three or four millimeters below the lower temporal quadrant of the cornea, extending upward across the cornea to its upper margin, the wound containing some prolapsed iris and ciliary body. It was stated that his eye was struck by a flying piece of stone three or four days before. There was considerable chemosis, and much pain. He was advised to have the eye removed at once, and consented; but when he was prepared for the operation later in the day,—refused. He was kept in the institution two days and urged from time to time to have the eye removed, but continued to refuse, when he was allowed to go out to consult his friends. On the following day he returned with the conviction that he could retain the eye, but was refused admission except for enucleation.

Two days later he returned with the eye badly swollen—beginning panophthalmitis, with so much pain that he was willing to have anything done to relieve the pain. At this time the eye was greatly swollen, much chemosis, and moderate exophthalmus; and now with his consent, the eye was removed before he changed his mind again.

On making meridional section of the eye the nasal half was found to be fairly free from the products of inflammation, except in the ciliary region. Macroscopic appearance of the fundus, normal; but in the temporal half there was a large amount of exudation extending backward about one-third of the diameter of the bulb, and the ciliary region throughout was embedded in purulent exudate. About three millimeters behind the site of the wound was found a piece of stone about five millimeters long, two and a half millimeters wide, and from one to two millimeters thick, weighing two and three-fourths grains.

Two days after the operation (Aug. 24th) the patient com-

plained that the remaining eye pained him a little, and was found to be getting red. Examination showed the fundus to be normal, but the iris had lost some of its luster, and the whole appearance of the eye was that of beginning sympathetic ophthalmia. Atropine was instilled to keep the pupil wide, and he was given 20 grains of sodium salicylate three times a day. Three days later this was increased to 40 grains, three times a day; and after about a week the eye became less painful, the redness a little less.

The eye continued to improve till Oct. 6th (about six weeks from date of last admission), when the eye was free from any signs of inflammation, fundus normal, and he was discharged.

The use of relatively large doses of sodium salicylate in this disease was first recommended so far as I am aware, by Dr. Harold Gifford, of Omaha, some two years ago, and he has reported some cases in which he had much more favorable results than previously by the standard treatment for the condition, which consists of large doses of potassium iodide with free inunctions of mercury.

In using the salicylates in large doses, the depression, as well as the tinnitus, may be relieved by taking it in brandy, and when thus administered, I have seldom seen either complained of to any extent.

This case reported has been discharged but a short time, and there is yet time for relapse, and should this occur, and he comes under my care, I propose to report it to this Society.

CLINICAL REPORT OF A CASE OF DIABETES IN A BOY.¹

BY F. J. HAHN, M.D., Bath, Pa.

The history of a case of diabetes in the young, occurred to me as being of interest and possibly of benefit. To me the case was very striking and possessed an unusual amount of interest. I will briefly give the clinical history from the time I first saw the case to the present time. True diabetes mellitus in the young is, as a rule, fatal. Some claim that there is never a cure.

Case.—C. K., age 10. Brought to my office by his parents April 14, 1901. The history as given was that the boy had "trouble with his water, passed it in bed involuntarily," besides being up

¹ Read before the Northampton County Medical Society, Oct. 18, 1901.

three or four times during the night. This was something very unusual for him, and was the first sign that something might be wrong. During the day he voided urine very frequently, as often as every 20 to 30 minutes. This was especially marked about a week before the above date. They thought the quantity was very much in excess of normal, and that it looked peculiar. Had constant craving for food and drink. Appetite inordinate. In spite of amount eaten he began to lose flesh very rapidly. The parents had no idea how much he had lost, but thought a great deal. All these changes were first noticed about two months prior. The boy did not seem like himself, but never complained of pain. Their idea was "that the child was growing too fast."

This, briefly, was the history as given. Indefinite to a degree, but sufficient for a clue as to what might be the cause.

Examination.—A poorly nourished boy—tall enough for age, but thin almost to emaciation; skin, dirty color; face, senile appearance, distressed and anxious; eyes, hollow. In general, a dried-up condition. Father and mother both living, and well, though of somewhat a nervous temperament. The boy also seems to be of a nervous type. No history of heredity obtainable, no injury to brain or cord. The patient seems bright.

Further examination showed a pulse of 90, temperature subnormal, muscles relaxed and flabby. Abdomen slightly protuberant, liver enlargement quite marked. No tenderness to be elicited anywhere. Boy stated that he had voided urine on leaving home, and was in the office about 15 minutes when he had desire, and passed over a pint and a half; so there was no difficulty in getting a specimen for examination. Questioning brought out the fact that he was always a hearty eater, and never paid much attention to what was eaten or how much. Some vomiting at intervals. Tongue dry, deep red in color, heavily coated at the base. Bowels very constipated. Skin dry and harsh, nails brittle. Vision defective. At school, when in rear part of room, could not see what was written on blackboard. Distant vision only about one-half of normal according to test card. Only about a week before, noticed some itching.

Urine.—Examination showed typical diabetic urine: pale, almost white with a greenish tinge, peculiar sugar odor, acid reaction, sp. gr. nearly 1050. By means of copper test (Feh-

ling's being most convenient), the glucose reaction appeared, not the slight yellow or orange precipitate, but a deep carmine, and a large quantity from merely a drop of the specimen. At this time no quantitative analysis was made. Albumen none.

The following is a statement of the progress of the disease:

Date.	Sp. gr.	Weight. Pounds.	Amount.
April 14.	1049	55 $\frac{1}{2}$	Little over one gallon.
" 21.	1040	54 $\frac{1}{2}$	Nearly half gallon.
" 28.	1036	56	Two quarts.
May 4.	1034	58 $\frac{3}{16}$	One and three-fourths quarts.
" 12.	1034	58 $\frac{7}{16}$	Two quarts, one gill.
" 21.	1026	59	One quart.
(No sugar.)			
" 27.	1030	59 $\frac{1}{2}$	One quart, one gill.
(At this time voided only six times in 24 hours.)			
June 3.	1030	58 $\frac{3}{16}$	One quart.
" 13.	1028	58 $\frac{1}{2}$	One quart.
" 22.	1026	58 $\frac{3}{4}$	One quart.
July 3.	1022	60	About normal.
" 6.	1020	60	About normal.
Aug. 19.	1020	60	About normal.
Sept. 10.	1020	61	About normal.
" 20.	(Attack of abdominal pain and diarrhea with some blood. Lasted only a few days and following week left for Buffalo.)		
Oct. 3.	(Another attack similar to first. Possibly indiscretion while away.)		
" 6.	1024	59 $\frac{1}{2}$	One quart.
(No sugar. No albumen.)			

Treatment.—Nothing new in the line of treatment was used. Carbohydrates were eliminated as much as possible. The parents being very anxious for the child's recovery, I had their full confidence and cooperation. The diet instituted was very rigid. I used a good many gluten preparations procured from the Health Food Co., of Philadelphia. Very few drugs were exhibited. Began with a laxative dose of the mild chlorid of mercury, and used it from time to time during treatment. Arsenic, increasing in dose, was used until the physiological effect was produced; then dropped to tolerant dose and continued at this. Codeine was given during the entire period. Began with one eighth grain t. i. d. and increased rapidly until slight somnolent effect appeared. The highest quantity taken was three grains a

day. This was kept up until a decided amelioration occurred and was continued, with scarcely any intermission, for almost six months. The condition then was such that treatment was discontinued for a week, when it was resumed for the same period ; later, the treatment was used for intervals of two and three weeks and finally stopped, and the effect noted. There was no change from the latter part of May until Oct. 5th and 12th, as before noted. The treatment was then resumed.

The result was very gratifying from the beginning. Moderate exercise was insisted upon, also good fresh air and warm baths. After three nights there was no more nocturnal incontinence. The quantity of urine decreased at the rate of a half to one pint a week. Color, less and less clear, and more amber. The weight increased, not to a remarkable degree, but very satisfactorily, taking into consideration the age and diet. Subsequent tests were made by the different methods and all pointed to a very large amount of glucose ; at its greatest, it was nearly 10 per cent. and then gradually decreased. Taking into consideration the amount voided, over one pound or more nearly 2 pounds of sugar must have been voided each 24 hours.

Résumé.—The clinical picture of a case of acute diabetes. There was the persistent sugar, excessive discharge, progressive loss of flesh and strength. No cause discoverable outside of a nervous or hepatic derangement, and excessive use of farinaceous foods. The two attacks of diarrhea ; then at times less urine and sugar, then again more. Also the reappearance of sugar on Oct. 6th, undoubtedly due to dietetic errors while away. There was, however, no increase of urine. By Oct. 12th it was free of sugar again.

On the whole, the case, so far, has improved satisfactorily. I saw patient a week ago and he was then looking very well, bright and active; color and general appearance good. Passes urine three or four times in 24 hours, but none at night. He attends school and has still a little trouble with his eyes at intervals, which may, however, be due to some refractive error. The liver is normal, also the temperature. No complications have as yet developed.

The points which struck me most forcibly were the age, large

quantity of sugar, and the prompt effect of diet and treatment. Whether this be only temporary or permanent remains to be seen. I am in a position to watch the case and will do so, examining the urine from time to time.

DISCUSSION BY DR. DUDLEY.

Mr. President: I have been much interested in Dr. Hahn's paper, and especially so in his reference to the effect of the disease upon the vision of the child. The cause of bad vision in a victim of diabetes, may be due to the effect of the disease upon several of the anatomic structures of the eye. We may have a keratitis, which will, of course, reduce the vision, but this will produce a visible lesion.

We may also get iritis which will also reduce the vision; this also produces a visible change in the appearance of the eye as does cataract, which is one of the commonest complications of this disease.

The most common disease of the fundus of the eye is retinitis, and this usually of the hemorrhagic form, though optic neuritis is occasionally met with.

One of the interesting effects of glucosuria on the eye is the frequent change of the refraction in some patients affected with this disease. A patient of this variety under my care within the past year, found that glasses which gave her best vision on a given day, were quite unsuited two or three weeks later. These changes consisted in a variation of her myopia and astigmatism in quantity, as well as a variation in the axis of the astigmatism.

The cause of this frequent change in the refraction may be due, either to a change in the shape of the lens by the absorption of glucose, or possibly by the change of its index of refraction by the presence of this substance, though I am not aware that this matter has ever been determined.

Lehigh Valley Medical Magazine

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LEHIGH VALLEY MEDICAL ASSOCIATION.

W. P. WALKER, M.D., Editor.

W. H. DUDLEY, M.D., Business Manager.

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EDITORIAL.

We are such stuff
As dreams are made on : and our little life
Is rounded with a sleep.—*Tempest*.

The aged Indian Brave may take delight in singing a death-song, wherein he recalls his deeds of prowess and the delights of his youth ; but the product of modern civilization rarely cares to write his own obituary notice. So it happens when, according to the action of the Lehigh Valley Medical Association, the time has come to pen the last editorial article—to place a “finis” at the close of the last page—and the search is made for the fitting word wherewith to say farewell, there is no desire to relate either the successes or the failures of the MAGAZINE during the even dozen years of its existence. Suffice it to say that the endeavor was made honestly to make it a journal of the profession, for the profession, and by the profession, apart from personality, selfish ends, or commercial gain. If at any time it fell short of

this purpose, the management now wishes to express regret for shortcomings.

It is a source of gratification that it is not discontinued because of financial embarrassment; either the time was not ripe for the development of a journal such as was planned or the planning was not wise, and rather than change the character and enter into competition in an already crowded field, or issue a mere apology, the Lehigh Valley Medical Association wisely decided to bring the publication to a close.

We realize that it has made many friends in the journalistic world and are gratified at the cordial reception given to it. Before we are numbered with the vast host of the "has-beens", we desire to thank our confrères, one and all, and wish them God-speed in every effort to benefit the profession they champion.

It will be pleasant to assume that our readers will, for a little while at least, miss our visits, but that is too much to expect. May we hope, like the Chesire Cat of "Alice in Wonderland," which in fading left the grin behind, that the last recollection of our little venture may be pleasant and pleasurable?

The Great White Plague.—Substantial advancement, whether in art, material resources, civilization, of science or what not, usually is accomplished quietly and gradually. Only rarely is there a convulsion in the course of human events, and a great truth suddenly thrust upon the attention of the world. We, indeed, frequently hear the fanfare of trumpets, only to have the lines of Horace brought to mind, for while the mountains labor, the product is among the wecest of mice.

The true chronicler should be alert to point out the passing progress. As this is the last opportunity for him so to do in the pages of the MAGAZINE, he wishes to call attention to the silent but wonderful advance made in the treatment of phthisis pulmonalis. The necessity for pure air, for proper diet, for correct recreation has been recognized for a long while and has been gradually receiving more nearly the attention it ought to receive. This treatment can usually be accomplished most successfully by the assistance of institutional life.

Institutions are organizing for this purpose on three planes. There is, *e. g.*, such institutions as the Idyllwild, in Southern California, where the man of means can struggle with the great

enemy with hopes for victory. This institution is singled out not so much for its excellence, but for the fact that it is largely owned and entirely managed by the medical profession. The profits accruing from the venture do not go to crowd the coffers of the capitalist, while the physicians receive the reward of the altruist, but the money invested is the savings of physicians and the dividends are for their benefit. The Association has a large tract of land among the mountains in Southern California, with a hotel, cottages, etc., all carefully sewerred and every proper sanitary precaution made, where the invalid can find pure air, out-of door life, correct diet, and the rest.

At the other extreme are the institutions such as has been recently instituted on the mountains near White Haven, where, instead of permitting the dread disease to work its ravages upon those whose lot in life makes it a struggle to keep above the waves when well, until it has gained so firm a hold that the County Hospital becomes the waiting place for death, the authorities come to the struggler's aid at the beginning and furnish an opportunity for the possibility of a recovery and the restoration to society of a useful member.

Between these extremes is to be found a large number unable to meet the expense of Idyllwild, unwilling to accept the assistance of an institution subsidized by the state. For such, an institution has been opened recently in Colorado, the fruitage of years of patient preparation. It is the Rocky Mountain Industrial Sanatorium. A tract of ground has been leased, with the privilege of purchase, some five miles southwest of Denver. It is already under cultivation and has an orchard of bearing trees, and is provided with satisfactory buildings for the proper care of patients for the present needs of the organization. It has the water rights for irrigation and ground for a garden. Moreover, it is within trolley distance from Denver, at a five-cent fare.

So much for the site, now for the plan: patients, properly recommended, to the capacity of the institution (now about 35) are received at the actual cost of living. At the same time opportunity is given them to take such part as they are able in the various industries of the institution, for which they will receive a compensation. A great complaint of the Colorado physician is that patients are sent there with insufficient money upon the

expectation of being able to secure employment. But opportunities are few for semiinvalids, and the limited resources of the patient compel him to unhygienic living. This institution is the outcome of an effort to correct this evil. No profit is to be expected from the maintenance, so that the inmate can secure proper care for less money than elsewhere. By cooperation, industries can be carried on, while the physical condition of the operative is taken into consideration, and the patient is thus enabled to still reduce his modest expenditure by pursuing some occupation not overtiring and depressing.

Of course, outside help is needed to make the scheme a success. Auxiliaries are establishing in various parts of the country to endow cottages and furnish rooms for patients, coming from their respective districts. The writer of this is personally acquainted with some of the management and believes it to be entirely trustworthy and to merit the cooperation of every one of our readers. Should this article cause the organization of several auxiliaries and this furnish a refuge for a number who are now struggling in defeat, and give them a show for victory, truly the *MAGAZINE*, like the fabled swan, will sing the sweetest song when dying. The Medical Director is Dr. A. M. Holmes, 205 Jackson Block, Denver, Colo., who will gladly reply to any inquiry.

LOCAL NEWS.

Vaccination and Tetanus.—The following communication received from the Pennsylvania State Board of Health is quoted for the benefit of our readers:

DEAR SIR:—I am instructed by the State Board of Health and Vital Statistics of the Commonwealth of Pennsylvania, to transmit to you a copy of the following resolutions adopted at a regular meeting held at Harrisburg, Thursday, November 21, 1901.

Very respectfully,

(Signed) BENJAMIN LEE, M.D.,
Secretary and Executive Officer.

Resolved, That in view of the very natural public apprehension in regard to the possibility of tetanus following vaccination, as illustrated by recent cases of this accident in a neighboring state, this Board desires to state its conviction founded upon a careful

study of the history of vaccination and of the cases referred to, that it has yet to be demonstrated that vaccine virus ever contains or becomes contaminated with the germ of tetanus. When such occurrences as those referred to take place, it is because, owing to carelessness, usually on the part of the person vaccinated, the germs of tetanus have gained access to the wound on the arm as they may to any other wound, abrasion or scratch upon the surface.

Resolved, That there is no reason for dreading, or abstaining from vaccination, because of these recent cases. This is sufficiently demonstrated by the fact that more than half a million persons have been vaccinated in and around the city of Philadelphia within the past few months without the occurrence of a single case of tetanus.

Resolved, That, inasmuch as new cases of smallpox are being reported to the Board daily from all parts of the state, the present would be a most unfortunate time to interrupt the general vaccination which is now in progress.

Resolved, That this Board condemns, in the strongest possible terms, the use of any material or medicament administered by the mouth as a substitute for vaccination, and that any physician furnishing a certificate of successful vaccination based upon the administration of any such substance or remedy, lays himself open to prosecution for violation of a state law.

Resolved, That this Board reaffirms its previous declaration of confidence in the value of vaccination as a preventative or modifier of the severity of smallpox, and its belief that the possibilities of serious results following its performance must be looked upon as infinitesimal in comparison with the inestimable advantages derived from the same.

NECROLOGY.

Jeremiah S. Trexler, M.D., died on Tuesday, September 24, 1901, at Kutztown, Pa. He was born at Trexlertown in 1832. His father, Jeremiah S. Trexler, was a prominent business man, well known throughout Lehigh County and eastern Berks.

In the Moravian schools of Emaus and Bethlehem he received his preliminary education. In his boyhood, he often visited the office of Dr. Charles A. Gerasch, one of the earliest and best known physicians of that neighborhood, who became greatly attached to the "bright little boy" and took delight in having him thoroughly drilled in the rudimentary studies prior to going to the medical department of the University of Pennsylvania,

from which institution he was graduated in 1854. Soon after graduation he located in Kutztown, and became associated with his preceptor, rapidly establishing himself in the confidence and affections of a large patronage.

In 1863 Dr. Trexler was mustered into the 73rd Pennsylvania Regiment of Volunteers, as assistant surgeon, in which capacity he served his country until discharged from the service on a surgeons' certificate of disability in 1865. At Chancellorsville he was taken prisoner. Soon after, he escaped and with the regiment was transferred to the army of the Cumberland and was with General Sherman, on the march to the sea. Dr. Trexler, during his younger years, showed marked ability as a sketch artist and carver. Some of his pen sketches during the rebellion were given prominent places in *Harper's Weekly* and *Frank Leslie's* illustrated paper, and his carved pipe heads and canes were highly prized by his many friends. In 1894 Dr. Trexler was the nominee of the Republican party for Congress in this district composed of Berks and Lehigh. In such esteem was he held by the masses that he lacked only 1948 votes of election in this stronghold of Democracy. Dr. Trexler spent the greater part of his life in Kutztown, and thus became identified with its progressive history. The water works, the agricultural society and fair, the trolley and the park, in fact all of its many industries owe existence to the encouragement and support he gave them. He was one of the promoters, benefactors, and earnest friends of the normal school and the national bank, in both of which he held prominent positions. Dr. Trexler was also a liberal entertainer, the hospitality of his house being well known, so well attested by the prominent men of letters, music, and politics, who from time to time visited Kutztown, and especially by the members of this Society, on the occasion of its visit in 1890. On every Christmas morning the children of Kutztown swarmed to his house to get a present of a box of candy, an orange, or a toy, a custom inaugurated by his foster father, Dr. Gerasch.

Among the floral tributes on the 28th, was one marked "The Childrens' Gift," contributed by the hundreds whom he had made happy on their holidays and birthdays. The town itself called a citizens' meeting to give expression to their loss and as a token of the sorrow for his many acts of benevolence and good will, re-

solved to suspend all business between 10 A.M. and 1 P.M., while his remains were being borne to their last resting place. A number of years ago, on account of declining health, the Doctor was compelled to relinquish active practice. With the hope of restoring the same he visited Europe, Canada, California, Florida, and nearly all the noted resorts of this country, and often delighted his friends with an account of his travels.

Dr. Trexler took great interest in free masonry and especially in the G.A.R., always appearing at its head in the memorial parade.

Dr. Trexler became identified with the Berks County Medical Society in 1881, and our great regret is that he found no time to leave us a legacy from his vast field of experience.

W. MURRAY WEIDMAN, } *Committee.*
ISRAEL CLEAVER, }

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